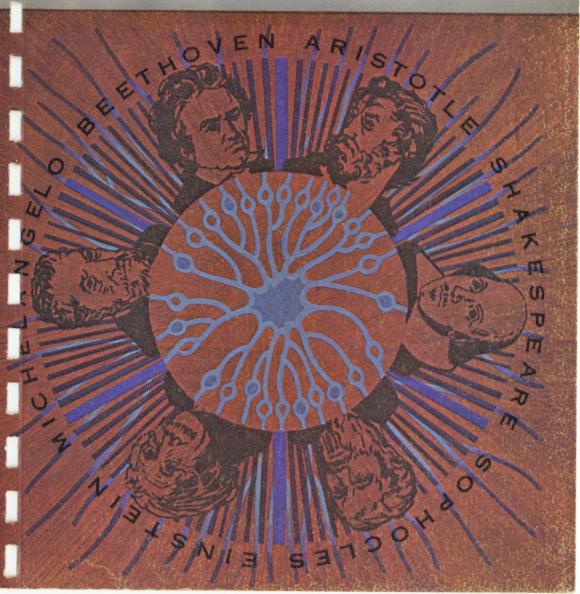
# MISSOURI SOUTHERN COLLEGE BULLETIN

1969/70



# 1969

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# Missouri Southern College

A TWO-YEAR JUNIOR COLLEGE



AND



# Missouri Southern State College

A TWO-YEAR SENIOR COLLEGE

JOPLIN, MISSOURI

Announcement of Courses 1969-1970

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# **FOREWORD**

This catalog presents general information, requirements for admission and graduation, and course offerings for the academic year 1969-70, beginning June 1, 1969. The register of administrative officers and instructors is for the 1968-1969 year. The College reserves the right to amend regulations and change fees when necessary.

# CORRESPONDENCE DIRECTORY MISSOURI SOUTHERN COLLEGE

Joplin, Missouri 64801 Tel. Area 417 624-8100

Admission of students	Director of Admissions
Alumni affairs	Director of Alumni Affairs
Athletic activities	Director of Athletics
Business affairs and purchases	Director of Financial Affairs
Catalog and bulletins	Director of Admissions
Credit evaluation and transcripts .	Registrar
Employment (student part-time)	Office of Financial Aids
Evening College	Director of Evening College
Faculty appointments	Dean of the College
Gifts and annuities	President
Housing	. Dean of Men, Dean of Women
Loans	Office of Financial Aids
Orientation	Dean of Men, Dean of Women
Financial Aids	Office of Financial Aids
Student Organizations	Dean of Men, Dean of Women
Summer Session	Dean of the College
Testing and Counseling Direct	ctor of Guidance and Counseling
Veterans affairs	Office of Financial Aids

# **COLLEGE CALENDAR 1969-1970**

SUMMER SESSION — 1969 EIGHT WEEKS SESSION
June 2 (9:00 A.M 4:00 P.M.) (6:30 P.M 9:00 P.M.)  Enrollment and Registration  June 3
FIRST SEMESTER — 1969-1970
September 8-9
September 15
SECOND SEMESTER — 1969-1970
January 26, 27, 28
May 31 Commencement

# MISSOURI SOUTHERN COLLEGE

# THE JUNIOR COLLEGE DISTRICT OF JASPER COUNTY

1969-1970

# **BOARD OF REGENTS**

Fred Hughes, President 1970
Thomas E. Taylor, Vice-President 1969
\*Elvin Ummel, Secretary
\*Gene Taylor, Treasurer

Mills H. Anderson 1971 Norval M. Matthews 1972 Jerry E. Wells, 1973

# **BOARD OF TRUSTEES**

Fred Hughes, President 1970
Gene Taylor, Vice-President 1972
Norval M. Matthews, Secretary 1968
\*Mills H. Anderson, Treasurer
Jerry E. Wells, 1970
Thomas E. Taylor 1970

\*Appointed by respective boards

Elvin Ummel 1972

# **ADMINISTRATIVE STAFF**

ADMINISTRATIVE STATE
Leon C. Billingsly President
Edward S. Phinney Dean of the College
Fred Cinotto Administrative Assistant
and Director of Placement and Alumni Affairs
Paul R. Shipman Administrative Assistant
and Director of Financial Affairs
James J. Altendorf Chairman, Division of Natural Sciences
and Mathematics
Harold Cooper Chairman, Division of Social Sciences
Cleetis Headlee Acting Chairman, Division of Humanities and Fine Arts
L. Keith Larimore Chairman, Division of Business and Economics
James K. Maupin Chairman, Division of Semi-Professional
and Technical Education
Charles F. Niess Chairman, Division of Education and Psychology
Director of Teacher Education
Floyd E. Belk Dean of Student Personnel Services
Dudley F. Stegge Dean of Men
Yvonna A. Wilson Dean of Women
George H. Volmert
W. Ralph Winton Director of Admissions
J. Merrell Junkins Acting Director of Guidance and Counseling Richard D. Humphrey Director of Aids and Awards
Lloyd L. Dryer
Larry K. Karst Counselor
Gale W. Bogard Director of Athletics
Billie M. Bristow College Nurse
Elmer E. Rodgers
Ross C. Snyder Director of Instructional Media
Loretta Frazier Reference Librarian
Cora Ditto Periodical Librarian
Doris Dotson Circulation Librarian
Elizabeth J. Mueller Processing Librarian
John Johnson Purchasing Agent
Sidney S. Shouse Chief Accountant
Brian D. Bickel Food Service Manager
Charles Carr Superintendent of Buildings and Grounds
Halsey Olliver Book Store Manager

FACULIT
Leon C. Billingsly President of the College and Professor of Education B.S., Southwest Missouri State College; M.S., Kansas State College of Pittsburg; Ed.D., University of Arkansas
Edward S. Phinney Dean of the College and Professor of History Th.B., A.B., Marion College; M.A., Butler University; Ph.D., University of Oregon
Roger E. Adams Instructor of Automotive Technology B.S.I.T., M.S., Kansas State College of Pittsburg
Mirza Ahmed Assistant Professor of Political Science A.B., Muslim University (Aligrah, India); M.A., University of South Dakota; Ph.D. Candidate, Southern Illinois University
James J. Altendorf Chairman, Division of Natural Sciences and Mathematics and Professor of Chemistry B.S., M.S., Kansas State College of Pittsburg; Ed.D., Oklahoma State University
V. L. Anderson Assistant Professor of Drafting B.S., Northwest Missouri State College; Stout Institute; M.S., Kansas State College of Pittsburg
Vernon D. Baiamonte Associate Professor of Chemistry A.B., M.A., Colorado State College; Ph.D., Indiana University
Clark W. Beasley Instructor of Biology B.S., Kansas State College of Pittsburg; Ph.D., University of Oklahoma
Floyd E. Belk Dean of Student Personnel Services and Associate Professor of Education and Psychology B.S., M.S., Kansas State College of Pittsburg; Ed.D., Oklahoma State University
David C. Bingman Assistant Professor of Biology B.S., M.S., Kansas State College of Pittsburg
M. Jane Blades Instructor of English B.S., University of Kansas; M.A., Kansas State College of Pittsburg
E. Enid Blevins

- Rochelle L. Boehning . . . . . . Associate Professor of Mathematics B.S., M.S., Kansas State College of Pittsburg; Ph.D. Candidate, Illinois Institute of Technology
- Gale W. Bogard ....... Director of Athletics and Assistant Professor of Physical Education B.S., University of Kansas; M.S., Ed.S., Kansas State Teachers College of Emporia
- G. Joyce Bowman . . . . . . . Instructor of English and Speech B.S., Southwest Missouri State College; M.A., University of Arkansas
- O. Leon Bradshaw . . . . . . . . . Assistant Professor of Psychology B.S., Kansas State College of Pittsburg; M.S., University of Wisconsin; Ed.D., Oklahoma State University
- Milton W. Brietzke . . . . . Associate Professor of Speech and Drama A.B., San Jose State College; M.A., Western Reserve University
- E. Elaine Bryant ...... Instructor of English B.S., M.S., Kansas State College of Pittsburg
- Robert D. Carpenter ...... Director of Computer Center and Instructor of Computer Programming and Data Processing B.S., Kansas State College of Pittsburg
- Fred Cinotto . . . . . Administrative Assistant, Director of Placement and Alumni Affairs, and Professor of Education B.S., M.S., Kansas State College of Pittsburg
- Francisco R. Colon . . . . . Assistant Professor of Foreign Languages B.S., Southwest Missouri State College; M.A., University of Illinois
- Edith M. Compton . . . . . Instructor of Business Education B.S., M.S., Kansas State College of Pittsburg
- Harold Cooper . . . . . . . . Chairman, Division of Social Sciences and Professor of History A.B., Berea College; M.A., Ph.D., University of Nebraska
- Clarence E. Cowan . . . . . Assistant Professor of Business Education B.S., Southwest Missouri State College; M.Ed., University of Missouri
- John M. Cragin . . . . . . . . . Assistant Professor of Physics B.S., United States Military Academy, West Point; M.S., Purdue University

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FACULIY
Frank Davis Basketball Coach and Instructor of Physical Education
B.S., Peru State Teachers College; M.S., Central Missouri State College
Leslie J. Deman Instructor of Business Administration B.B.A., M.A., University of Oklahoma
Darral A. Dishman Instructor of Art B.F.A., Kansas City Art Institute; M.S., Kansas State College of Pittsburg
Cora Ditto
Lloyd L. Dryer College Psychologist and Professor of Psychology B.S., M.A., Ed.D., Oklahoma State University
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<sup>\*</sup> First Semester

FACULIY
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Harry C. Gockel Associate Professor of History and Geography A.B., M.A., Washington University; M.S., University of Wisconsin
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Clark I. Guilliams Associate Professor of Education and Psychology A.B., M.Ed., University of Missouri; EdD., University of Arkansas
Charles N. Harris

\*\* Second Semester

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Delbert I. Johnson Instructor of Music B.M.E., M.M.E., University of Wichita
James D. Johnson Instructor of English A.B., M.A., Ph.D. Candidate, University of Arkansas
Jack D. Jolly Instructor of Mathematics B.S.E., M.A., University of Oklahoma

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- - B.S.E., Southwest Missouri State College; M.S., Kansas State College of Pittsburg; Ed.D., University of Arkansas
- Bobbie Z. Short ...... Instructor of English and Speech B.S., Southwest Missouri State College; M.S., Kansas State College of Pittsburg
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- Ross C. Snyder ...... Director of Educational Media and Associate Professor of Education B.S., Taylor University; M.A., Ball State University
- \* On leave of absence to complete doctoral studies 1968-69.

- \*Sam J. Starkey . . . Assistant Professor of Education and Psychology B.S., M.E., University of Arkansas Annetta E. St. Clair ...... Instructor of Political Sciences A.B., M.A., Kansas State College of Pittsburg Dudley F. Stegge ...... Dean of Men and Assistant Professor of Physical Education B.S., M.S., Kansas State College of Pittsburg Daniel R. Stengel ..... Instructor of Business Administration B.S., M.A., University of Nebraska Dorothy A. Stone . . Associate Professor of Business Administration B.S., M.A., University of Missouri Arthur L. Strobel ..... Assistant Professor of Physics B.S., Southeast Missouri State College; M.S., University of Arkansas William L. Taylor ..... Instructor of Music B.S., M.M.E., University of Arkansas \*\*John W. Tiede ...... Instructor of Business Administration B.S., Southwest Missouri State College; M.B.A., University of Arkansas Lora Todd ...... Instructor of English A.B., Baker University; M.A., University of Wisconsin Curtis J. Twenter . . . . . Associate Professor of Physical Education B.S., M.E., Ed.D., University of Missouri George H. Volmert . . . . . . . . . . . Registrar; Instructor B.S., M.A., Northeast Missouri State College Yvonna A. Wilson . . . . . Dean of Women; Assistant Professor A.B., Arkansas College; M.E., University of Arkansas W. Ralph Winton . . . . . Director of Admissions; Instructor B.S., Drury College; M.E., University of Arkansas Pauline W. Wolfe ..... Assistant Professor of English A.B., University of Wyoming; M.A., Northwestern University; Graduate Study at University of New Mexico
- \* On leave of absence to complete doctoral studies 1968-69.
- \*\* First Semester

of Arkansas

Venus Yount ...... Assistant Professor of Physical Education B.S., Kansas State College of Pittsburg; M.A., University

# PART TIME FACULTY

PART TIME FACULTY
Hazel R. Brietzke Instructor of English B.S., Auburn University
Jerry P. Coburn Instructor of Drafting B.S., M.S., Kansas State College of Pittsburg
Frank Collins Instructor of Business Administration B.S., M.S., Kansas State College of Pittsburg
Michael P. Cusack Instructor of Business Administration B.S., University of Kansas
James F. DeNeen Instructor of Business Law B.S., LL.B., University of Missouri
Suzan A. DeNeen Instructor of Business Education B.S., University of Kansas
Doris M. Harryman Instructor of Nursing B.S. in Nursing, University of Missouri
Retha L. Ketchum Instructor of Nursing B.S. in Nursing, Creighton University
Alexander R. Orr Instructor of Philosophy A.B., M.A., University of Toronto
Paul W. Schairer Instructor of Foreign Languages A.B., Capital University; B.D., S.T.M., Wartburg Theological Seminary
Phillip L. Sells Instructor of Business Administration B.S., Oklahoma State University
Lela M. Smith Assistant Professor of English A.B., B.S., Drury College; M.A., George Peabody College for Teachers
Vera M. Steininger Instructor of Business Education A.B., University of Kansas; M.A., Columbia University
Max E. Thompson Instructor of Business Administration A.B., Baker University; M.A., University of Kansas
William B. Wieda Instructor of Computer Science and Data Processing A.B., Westminster College
Leo J. Wright Instructor of Computer Science and Data Processing
B.S., Kansas State College of Pittsburg

# THE COMMUNITY AND SERVICE AREA

Missouri Southern College is situated in Southwest Missouri, eleven miles from the Kansas state line, 40 miles from the Arkansas border, and 15 miles from Oklahoma. In this southwest part of Missouri lies a nine-county area comprising approximately 200,000 people.

The campus, located at the northeast edge of Joplin on 230 acres of gently rolling land, is within commuting distance of a large college population. Joplin, a city of 45,000, is the hub of a four-state area with its network of east-west and north-south major highways and good air transportation schedules. Known in the early 1900's as an area of diversified agricultural activities and lead and zinc mining, it is even better known today as a rapidly growing industrial and service center. It is within easy driving distance of the Ozarks, one of the great recreational areas of the United States. Cultural activities, educational programs from kindergarten to college, and beautiful churches for all faiths are ideal for a college setting.

## **HISTORY**

Missouri Southern College originated in 1937 as Joplin Junior College. It was a part of the Joplin Public School System, but the first year of classes was conducted by the Extension Division of the University of Missouri.

The first year of classes was held in the Joplin Senior High School building. The college moved into its own building at Fourth Street and Byers Avenue on September 6, 1938. After 20 years in this location the college was transferred to 310 West Eighth Street where it continued operation until the close of the 1966-67 academic year. The educational and administrative functions of Missouri Southern College were moved to the new 238-acre campus in June 1967. Since that date the college has been functioning in a new, multiple building campus with an enlarged program and student body.

Beginning in 1964, organizational and legal developments took place rapidly. On April 1, 1964 the voters created the Junior College District of Jasper County, naming a six-member Board of Trustees. This act ended the junior college's 27 years of existence as a part of the Joplin Public School System. The new junior college district included Jasper County and parts of three other counties — Newton, Lawrence, and Barton. The institution was renamed Jasper County Junior College.

Life as a separate junior college district did not exist long. On July 22, 1965, the 73rd General Assembly of the Missouri Legislature passed House Bill No. 210 providing for the establishment of a two-year state senior college in Jasper County when the academic facilities of the Junior College District of Jasper County should become available. Anticipating the passage of the House Bill No. 210, the Board of Trustees adopted the name Missouri Southern College in May, 1965.

The legislative act creating the state senior college provided for the administration of the junior and senior college through a governor-appointed Board of Regents. The appointments were made on October 13, 1965, the date that marks the beginning of the operation of Missouri Southern College under the Board of Regents. The law directed the Board of Trustees to assume the responsibility of levying the necessary taxes within the Junior College District of Jasper County which, together with state junior college aid and funds available from other sources, are sufficient to pay the costs of the junior college operation and the costs of any capital improvements for both the junior and senior colleges. The state provides the operating cost of the senior college.

## **COLLEGE PROFILE**

The combining of a two-year, locally supported junior college with a two-year state supported senior college makes Missouri Southern College unique in college history. Although the two programs have separate support, they have one faculty and one administration functioning under the supervision of the Board of Regents appointed by the Governor.

The two-year junior college has an open-door admissions policy for graduates of Missouri high schools. It offers liberal arts and pre-professional transfer programs, terminal programs in technical education, and certificate programs. The senior college offers studies leading to a bachelor's degree in a number of major areas in the liberal arts, teacher education and business administration.

# PHILOSOPHY AND PURPOSES

Missouri Southern College is dedicated to the principle of developing a college community where all members are given the opportunity to learn, not only for the sake of learning, but for the purpose of revealing ways to live a better life. This principle will enable the individual to live a more responsible and productive life commensurate with his fullest potential.

Since higher education benefits both the individual and the society of which he is a member, Missouri Southern College offers a

diversity of study designed to satisfy a wide range of student interests. The College proposes to maintain high quality instruction at all levels, continuing the junior college tradition.

Missouri Southern College shares a responsibility with other state colleges to serve any eligible student in the State of Missouri who may apply for admission. In addition, the College also recognizes its responsibility and obligation to the citizens of The Junior College District of Jasper County, Missouri, making every effort to serve the needs of the community.

The College attempts to fulfill its obligation to both state and community by:

Providing a program of general education for all students;

Preparing students for professional and graduate programs of study;

Preparing teachers for elementary and secondary schools;

Preparing students for business, industry, and government;

Providing a variety of technical programs;

Serving as a center for adult education and community activities.

# STANDARDS FOR STUDENT CONDUCT

As active members of the college community, students at Missouri Southern College and Missouri Southern State College have the rights and privileges enjoyed by members of all democratic communities. They also have the responsibilities and obligations which accompany these rights. Missouri Southern College and Missouri Southern State College are guided by and observe the principle that there shall be no difference in the treatment of persons because of race, creed, color, or national origin; and all members of the academic community are expected to support this principle.

Students have the responsibility of upholding the standards, traditions, and policies of the college which has granted them membership in the academic community at their own request. They also have the responsibility of making maximum use of their abilities, of exercising good judgment, of observing the rights of others, and of adhering to the requirements of adult society.

In addition, the following general policies are in effect:

1. Students have the obligation to obey all rules and regulations and to preserve all property provided for their education.

2. Students are expected to conform to all federal, state and local laws. Gambling, alcoholic beverages, drugs, firearms, ammunition, and explosives are specifically prohibited on college property and in off-campus student living quarters.

3. The conduct of the individual student is an important indication of his character and of his future potential in life. Cheating,

falsification of documents and immoral conduct will not be tolerated.

- 4. Students are expected to conform to the usually accepted social customs of the community.
- 5. Students shall not engage in or incite others to participate in obstructive or disruptive activities, deprive others of their rights, do harm to other individuals or property, or interfere with college or other officials in the performance of their duties.
- 6. The College Union of Missouri Southern College and Missouri Southern State College and its facilities are dedicated to and for the primary use of the students, faculty, staff and their authorized guests. Individuals entertaining guests in the College Union are responsible for their proper identification, registration, and conformance to the rules established for such guests. When not in use by campus organizations, off-campus groups may use the facilities of the Union.
- 7. The facilities of the Residence Halls at Missouri Southern College and Missouri Southern State College are primarily for the use of the residents thereof and their invited guests. The host is responsible for the registration and conduct of his guests. Disciplinary action will be taken against non-residents making unauthorized use of residence hall facilities.
- 8. The prevention of fire and the safety of others is the responsibility of the individual. Students shall not set off false fire alarms, misuse fire equipment, or refuse to obey lawful directions by fire wardens.

The foregoing shall apply to all student conduct, and failure to observe these standards will constitute basis for disciplinary action. Registration and participation as a student in Missouri Southern College or Missouri Southern State College shall constitute full acceptance of these standards, as well as of all other rules and standards of conduct which have been or may be adopted.

# **ACCREDITATION AND MEMBERSHIPS**

Missouri Southern College is accredited by the North Central Association of Colleges and Secondary Schools and by the Missouri State Department of Education.

Major memberships include the American Council on Education, the American Association of State Colleges and Universities, the American Association of Colleges for Teacher Education, the American Association of Junior Colleges, the Council of North Central Junior Colleges, and the Missouri Association of Junior Colleges.

## THE CAMPUS

Missouri Southern College is located at the corner of Newman and Duquesne Roads near the northeast edge of Joplin. Nine new buildings and several remodeled older buildings serve the instructional and student activity needs. New residence halls and a college union are planned for the near future.

Spiva Library, named in honor of the late Mr. George A. Spiva of Joplin, a friend and generous supporter of the college, provides an atmosphere which contributes to an intellectual climate. Open stacks, listening laboratories that utilize dialogue equipment, conference rooms, and typing stations provide students with excellent facilities for study and research.

Hearnes Hall is named after the Honorable Warren E. Hearnes, Governor of Missouri, whose understanding of the educational needs of Southwest Missouri made possible the realization of a four-year college program. The building is the administration headquarters and the reception center of the campus. It contains, also, instructional classrooms and faculty offices.

The L. R. Reynolds, Jr., Science and Mathematics Hall provides three large, elevated lecture rooms, regular classrooms, science laboratories, the computer center, and faculty offices. It is well equipped to meet the requirements of science and mathematics programs.

Fine Arts Hall is a complex of two buildings connected by an arcade that serves the areas of Art and Music. The art building includes a large exhibit hall that serves the Spiva Art Center of Joplin as well as the needs of the college.

The Physical Education Building houses the college basketball floor, classrooms, faculty offices, and many facilities for physical education classes.

The College Union serves the total campus with cafeteria, coffee shop, bookstore, lounge areas, Student Senate offices, yearbook offices, faculty lounge, ballroom, etc.

The Business Administration and Economics Building is a combination of the old Mansion House and the new building addition. It houses specialized and regular classrooms and faculty offices.

The Barn Theatre is a barn converted into an air-conditioned theatre with classrooms, dressing rooms, costume rooms, ticket booth and foyer.

**Kuhn Hall** is a new structure that provides facilities for the nursing education program and the student health center. This building is named after Dr. J. R. Kuhn, Jr., a strong supporter and leader of the nursing education program at Missouri Southern College. The Student Health Center is located in Kuhn Hall. A full-time registered nurse is on duty and medical doctors from the community provide services at stated hours.

The Auto-Technology Buildings are two structures that serve the auto-technology program with classroom, shops and faculty offices.

The College Placement Building is headquarters for the College Placement Services and Alumni Offices. It contains offices, interviewing rooms, and one academic facility — the video tape laboratory.



## SCHEDULE OF FEES

All fees are due and payable at the time of registration each semester. Registration is not complete until all fees are paid.

The College reserves the right to change fees without notice.

INCIDENTAL FEES:

INCIDENTAL FEES:	Fall and S	oring Semesters	Summer Term		
	8 hours or more	Less than 8 hours			
I. Residents of the Junior College District					
Junior College Division	\$ 85	\$ 6 per hr.	\$ 6 per hr.		
Senior College Division	130	9 per hr.	10 per hr.		
II. Residents of Missouri (Outside Junior College	ge District)				
Junior College Division	\$130	\$ 9 per hr.	\$10 per hr.		
Senior College Division	130	9 per hr.	10 per hr.		
III. Non-Residents (Out-of-State)					
Junior College Division	\$190	\$12 per hr.	\$22 per hr.		
Senior College Division	190	12 per hr.	22 per hr.		
OTHER FEES:					
Application for admission	\$ 5.00				
Applied music	32.00				
Change of class schedule	2.00				
Commencement Laboratory breakage and	10.00				
materials	cost				
Towel Fee for physical					
activity classes	1.25				
Late registration (full time)	10.00				
(part time)	5.00				
Textbook rental (50% refundable)					
Spring and fall semester					
(over 8 hours)	30.00				
Spring and fall semester (under 8 hours)					
and summer term	6.00 per course				
Transcripts	1.00				
Yearbook (Price set at registr					

**Application for Admission:** A non-refundable application fee of \$5.00 is charged for processing applications for admission. The payment of this fee should be mailed with the application.

Applied Music: For one 30-minute lesson per week in applied music, the usual fee is \$32.00 per semester. The fee is paid to the instructor.

Change of Class Schedule: Students are charged \$2.00 for each class change made after classes begin (refer to College calendar). Students registered for 8 or more credit hours before and after the change in schedule will pay only the \$2.00 change fee. Those changing from 7 or less hours to 8 or more hours must pay the full incidental and textbook fees and the \$2.00 change fee. Those who are registered for 8 or more hours and change to 7 or less hours during the change-of-registration week will receive a refund and will be charged by the credit hour.

Commencement: Candidates for the Associate or Baccalaureate degrees are charged a \$10.00 commencement fee. This covers the cost of the diploma, rental of cap and gown, and other commencement activities. The fee is subject to refund only when the candidate fails to qualify for graduation.

Laboratory Breakage and Materials: There are no charges for the use of equipment in laboratories. The student will be expected to pay for excessive breakage or loss of equipment due to negligence on the part of the student. A fair actual value of the loss will be determined by school officials. Students will pay for materials used in individual projects. (Example: automotive parts.)

Late Registration: A late registration fee of \$10 is charged full-time students who register after classwork begins. Five dollars is charged part-time students. This fee is not refundable.

Textbook Rental and Instructional Services: Students enrolled during a semester in eight or more credit hours pay a \$15.00 non-refundable textbook rental fee (includes normal laboratory fees and and cost of service on instructional equipment) and a \$15.00 textbook deposit. Students enrolled in less than eight credit hours during any semester pay a \$3.00 deposit and \$3.00 rental for each course in which they are enrolled. All summer students pay \$3.00 rental and \$3.00 deposit for each course in which they are enrolled. The deposit is refunded when the student has returned all books, materials, and equipment in satisfactory condition. (Books may be purchased for full retail price.)

**Towel Fee:** A \$1.25 fee is charged each semester to students enrolled in "physical activity" classes. A towel and the weekly laundry of it is furnished by the College.

**Transcripts:** Each student is entitled to two official transcripts without charge. There is a charge of \$1.00 for each additional copy. Payment must accompany the request for each transcript.

**Yearbook:** The **Crossroads** may be purchased by students at registration time. The price will be announced during registration week.

Miscellaneous Fees: Occasionally a fee is charged for classroom materials, such as subscriptions to a periodical, or line charges for bowling in physical education, or purchase of paperback books in addition to the textbook rental.

Student Activity Privileges: Students enrolled in less than eight hours during a semester may purchase student activity tickets.

Evening College: Students enrolled in evening classes for regular college credit courses, applicable toward an Associate or Baccalaureate Degree, are subject to the same fees, rules, and regulations of the Day College. Special fees are announced in the Evening College Bulletin for classes not applicable to an Associate or Baccalaureate Degree.

**Summer Session:** Rules and regulations which govern admission to the first and second semester during the regular school year shall also apply to the Summer Session.

**Refund Policy:** Students enrolled in the fall and spring semesters who drop out of the College before the fifth week of the semester are entitled to a partial refund of refundable fees. The refund must be claimed during the term for which the refund applies. The refund will be computed as of the date the Registrar receives the withdrawal form completely and correctly executed. The refund schedule is as follows:

Within the first and second weeks . . . . . 80 per cent refund Within the third and fourth weeks . . . . . 50 per cent refund After the fourth week . . . . . . No refund

Summer term refunds are as described above, except that no refunds are given after the third week.



The maximum intellectual growth and personal development of the college student is a combination of academic study and participation in out-of-class activities. Therefore, the educational program of Missouri Southern College includes all student-college relations in addition to formal instruction.

The student personnel services are designed to supplement, complement, and implement the academic program of the College.

# **FINANCIAL AIDS**

Missouri Southern College Academic Scholarships

## **General Information**

Listed below are the scholarships that will be awarded by Missouri Southern College for the 1969-70 academic year. Write for scholarship applications to:

OFFICE OF FINANCIAL AIDS Missouri Southern College Joplin, Missouri 64801

# The Regents and Trustees Scholarships

# The President's Scholarships

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college and are administered by the principal of the recipient's high school.

Basis of Selection:

The scholarships are awarded to the first and second ranking students in the eight high schools located in Jasper County.

# The Dean's Scholarships

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college and are administered by the principal of the recipient's high school.

Basis of Selection:

The scholarships are awarded to the students in the upper ten percent of their graduating classes. The college grants scholarships on the basis of one for each fifty students in a graduating class.

# Missouri Southern College Patrons' Scholarships

The following scholarships have been made available by interested individuals, service organizations, business firms, industries, and local civic organizations:

# **SCHOLARSHIP DONORS**

	Number of	Value of Each
Donor	Scholarships	Scholarship
Mr. and Mrs. Elmer Allgeier	1	\$200
American Association of University Wo		\$125
Anonymous #1	5	\$200
Anonymous #2	2	\$200
Anonymous #3	3	\$100
Anonymous #4	1	\$200
Anonymous #5	1	\$100
Anonymous #6	1	\$200
Association for Childhood Education (Jo		\$200
Auxiliary Jasper County Medical Associ	ation 1	\$200
Bank of Carthage	2	\$200
Beta Sigma Phi (Joplin)	1	\$75
Beta Sigma Phi (Webb City)	1	\$200
Russell Belden	8	\$100
Business and Professional Women's Clu	b	
(Webb City)	2	\$120
Mr. and Mrs. Earl Campbell	1	\$100
Carthage Marble Corporation	3	\$200
Carthage Publishing Company	1	\$200
Central National Bank of Carthage	1	\$200
Citizens Bank of Carl Junction	1	\$200
Citizens Bank of Joplin	1	\$200
Ada Coffey	2	\$150
Crown Coach Company	1	\$200
	1	\$100
Electric Motor Supply Company	5	\$200
Empire District Electric Company	1	\$300
Exchange Club of Joplin	1	\$200
Fifteenth Street Lumber Company	2	\$200
First National Bank of Sarcoxie	1	\$200
First State Bank of Joplin	1	\$50
Forty and Eight		
Mr. and Mrs. Harry Gockel	1	\$200
Joe Harding Supply Company	1	\$200
Hertz Rent-A-Car	1	\$100
Mrs. Dorothea Hoover	1	\$200
Horton Office Supply	1	\$200
Jasper County Medical Association	3	\$200
Dr. Virgil Jeans	1	\$100
Joplin Board of Realtors	2	\$200
Joplin Cement Company	2	\$100

Joplin Coca Cola Company	1	\$100
Joplin Globe Publishing Company	1	\$200
Joplin News Company	1	\$100
Joplin Rotary Anns	2	\$200
KFSB — Spiva Memorial	1	\$160
Francis Rae King Memorial	1	\$500
KOAM — TV	1	\$200
KODE — TV	1	\$200
M-P Construction Company	2	\$200
Jasper County Insurance Agents	3	\$200
MSC Alumni	1	\$200
MSC Community Symphony	5	\$100
MSC Mathematics Club	2	\$100
William Neal Enterprises	1	\$200
Newton's Jewelry	1	\$200
Florence Nightingale	1	\$200
Pilot Club	3	\$170
L. R. Reynolds, Jr. Memorial	1	\$200
Jon Alan Rippee Memorial	1	\$200
Soroptimist Club of Joplin	2	\$200
Hugh Sisk Memorial	1	\$100
Southtown Meat Company	1	\$200
George A. Spiva Memorial	1	\$500
Vera Steininger	1	\$120
Thriftway Super Market	1	\$200
Dr. and Mrs. John Windle	1	\$200

#### PERFORMING AIDS & AWARDS

Awards are made to individuals who have demonstrated success or high potential in basketball, football, music, or dramatics. These individuals must show satisfactory progress in these college performance areas in order to continue the aid. Applications for performing aids should be made to the director or sponsor of the particular activity.

Basketball Coach
Football Coach
Director of Music Activities

#### **WORK**

# **Student Employment**

The college Student Employment program is a work program set up by the college to assist those students who need a job while attending schoool. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during the vacation periods. Preference is given to those students who are

qualified to fill the job openings and have had experience in fields related to the job openings. Employment is on campus only.

# Federal Work-Study Program

The Federal Work-Study program is a program whereby students who must have a job to help pay for college expenses may be employed by the college or certain other non-profit agencies. Preference must be given students from low-income families. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during the summer and other vacation periods when they do not have classes.

## **Student Assistantships**

The Student Assistantships are available in several departments. These are positions with special educational and personal qualifications and involve close cooperation with the faculty member in charge. Application should be made in writing and in person to the head of the department prior to April 15 for assistantships for the following college year. Assistantships are available in the following areas:

College yearbook College newspaper Education Department

#### LOANS

#### **National Defense Student Loans**

High school graduates who are accepted for enrollment at Missouri Southern College and who need financial assistance to pay enrollment fees and other costs are eligible for student loans. The loans bear no interest until nine months after the student ends his studies. This applies whether the individual remains a student at Missouri Southern College or transfers to another institution. Nine months after the student ceases his studies the unpaid balance of the loan begins to draw interest at the rate of four percent (4%) per year. Repayment of the loan may be as low as \$15.00 per month and, depending on the amount of the loan, may be extended over as much as a ten-year period. If a borrower becomes a full-time teacher in an elementary or secondary school or in an institution of higher education, as much as half of the loan may be forgiven at the rate of ten percent (10%) for each year of teaching service. \*Repayment of these loans may be deferred up to a total of three years while a borrower is serving in the Armed Forces, with the Peace Corps, or VISTA.

<sup>\*</sup>This section is Guaranteed Loans.

# **Guaranteed Loan Program**

The Guaranteed Loan Program is administered jointly by the college and various banks and other financial institutions. Under this program a student may borrow from a bank or other financial institution. A student from a family with an adjusted income of less than \$15,000 a year pays no interest while attending an eligible college, business college, or technical or vocational school. Repayment of principal and four percent (4%) interest begins when the student ceases his course of study. Present regulations stipulate that repayment must be completed within five years of the date the student ceases his course of study.

# **Educational Opportunity Grants**

Missouri Southern College has funds for a limited number of Educational Opportunity Grants. Under this program grants may be awarded to students with exceptional financial needs. Grants will be approximately \$200 a year at Missouri Southern College. As an incentive to students, an additional award of \$200, if needed, will be awarded to those students who were in the upper-half of their college class during the preceding academic year.

## **Small, Short-Term Loans**

David Pearl B'Nai B'Rith Loan Fund

This fund was established in memory of David Pearl, a member of the above fraternal organization.

Mitchell Loan Fund

This fund was established in memory of Thomas Mitchell.

Joplin Business and Professional Women's Club Loan Fund This fund was established to assist students in need.

Arnold E. Irwin Loan Fund

This fund was established in memory of Mr. Irwin who was a faculty member of Joplin Junior College.

# How to Apply for Financial Aid

All applicants who wish to be considered for financial aid must complete the following requirements:

- Complete your application for admission to Missouri Southern College.
- 2. Pay your \$5.00 admission fee.
- 3. Complete your financial aid application.

Applicants for financial aid must have completed a satisfactory financial aids program well in advance of each semester's registration and have on file in the Financial Aids Office all application forms.

Applications for all scholarships, work, and loans may be obtained by writing to the head of the department which is in charge of the assistantship program.

Applications for Performing Aids and Awards should be made directly to the faculty member in charge of the program.

For further information regarding financial aid write or call:

OFFICE OF FINANCIAL AIDS Missouri Southern College Newman and Duquesne Roads Joplin, Missouri 64801 417 624-8100

#### **Residence Facilities**

Limited college residence facilities are planned for those who are enrolled as full-time students in Missouri Southern College.

Two permanent residence halls, one with 212 accommodations for men and one with 112 accommodations for women, will be available in January 1970. They are located at the heart of the campus near the new College Union, the library, classrooms, and the gymnasium.

The large first floor lounge and recreation areas are the central features of each building. A complete vending machine complex, a library, and study areas are available on the first floor of each of these buildings. Each room will have beds, closets, built-in desks and desk chairs. Coin operated laundry facilities are available in the halls. Private telephones may be installed in each room with the occupants assuming responsibility for the installation charges plus the monthly telephone bill.

# **Contractual Arrangements for Residence Halls**

An application and contract accompanied by a \$25 security deposit fee is required for reservation in a College residence hall. This is a combined contract for room and meals. The \$25 security deposit is forfeited if the contract is cancelled after August 1 for the fall term or 30 days before the opening of any other term for which the contract is first effective. The College retains the \$25 as a security deposit as long as the student is in residence and this deposit is not

applicable to the housing account. The deposit will be refunded upon termination of the contract if all terms of the contract are fulfilled.

This contract is effective for the entire academic year (fall and spring semesters); or is effective for the remaining portion of the academic year when entered into after the beginning of the fall term.

A student may request cancellation of the contract at the end of a term because of completion of graduation requirements or if an emergency beyond his control necessitates his withdrawal from school. If this request is filed with the Housing Director at least 30 days before the end of the term, and if approved, the deposit may be refunded unless there is a damage charge, outstanding account, or other violation of the contract. Students should refer to contract for detailed terms.

The College reserves all rights in connection with room assignments which are made in the order in which applications are received. Students' preferences are considered, but there can be no guarantee that assignments will be made in accordance with the preferences.

The residence halls and food services are operated on a non-profit basis by the College, and the established rates are subject to change by action of the Board of Regents. Meals are served three times daily.

Residence hall rooms may not be occupied by students earlier than 24 hours before they are required by the College to be in attendance. Students are to vacate rooms 24 hours after the term officially closes.

Reservations in residence halls are not held beyond 36 hours after the student is required to be on campus unless special arrangements have been made with the Housing Director.

The College is not responsible for the loss of, or damage to, any personal property of students. Parents should arrange for insurance coverage of personal property within the framework of their regular household policies.

# **Housing and Food Service Rates**

The following rates are based on advance payments for the semester. Payments on any other basis must be approved by the Business Office.

Board and Room

Mens' Residence Hall

Womens' Residence Hall

\$400.00

\$400.00

# **Off-Campus Housing**

Although Missouri Southern College has only limited on-campus housing in residence halls, a list of desirable places to live in private homes, hotels, and apartments is available in the office of the Director of Housing, Sleeping rooms vary in rental from four to six dollars per week. Rooms with kitchen privileges and small apartments are also available to students at reasonable cost.

# **College Union**

The College Union is a social, cultural, recreational, and service center for student, faculty, and alumni. The activities in this building are planned and directed by the College Union Board.

On the ground floor are located various offices, the bookstore,

the lounge, and a snack bar.

The ballroom and special meeting rooms are located on the upper level of the College Union.

The cafeteria, the faculty lounge, and the food service offices are located on the main floor. An elevator connects the three floors.

#### **Social Standards**

A student attending Missouri Southern College is expected to maintain a high standard of moral conduct. Forfeiture of the privilege to attend may result from unsatisfactory conduct. Students are expected to demonstrate maturity in their judgment.

Appropriate dress is expected on the campus during the regular

school day.

Missouri Southern College does not permit the use of alcoholic beverages on campus. Any violation to this rule is subject to disciplinary action.

Smoking is prohibited in the library and in classrooms.

#### **Placement Services**

The College maintains centralized placement services through the Placement Office located in the College Placement Building. The services are designed to assist students and alumni seeking employment and to serve officials of schools, business, industry, and government seeking personnel. Students and alumni are invited to use the services of the Placement Office. Degree candidates must enroll with the Placement Office as part of their graduation requirements. There are no charges for this service.

The Placement Office maintains information folders on job possibilities, requirements, salaries, etc. in a manner readily accessible for student use. No appointment is necessary to go through

these materials. In addition, the office personnel will assist students in making effective applications and help them to recognize and observe good professional procedures. Students are asked to visit the Placement Office regularly for job announcements and new library resources for career planning.

Officials of schools, business, industry and government are invited to visit the College and use the services of the Placement Office. Credentials of candidates are available for review and interviews may be scheduled on campus. Requests for personnel needs should be directed to the Director of Placement, Missouri Southern College, Joplin, Missouri 64801. Phone 417 624-8100, Ext. 238.

#### **Student Health Center**

A new Student Health Center has just been completed and is now staffed by a part-time physician and a full-time registered nurse. This new facility was designed with the latest health techniques in mind.

The out-patient clinic hours for the 1969-70 school year will be announced in September. No charge will be made for service during these hours but students are expected to pay for drugs, EKG's, X-rays, ambulance service or minor surgery, except where covered by any insurance the student or his family may have. The College reserves the right to adjust benefits to the students within the limits of the funds made available for the health services through incidental fees paid by students.

#### **Student Insurance**

A voluntary accident and sickness insurance plan for students at Missouri Southern College is available. It is designed as a supplement to the health services already offered to all full-time students through the Health Center. This voluntary insurance program also covers emergencies and provides further protection while the student is away from the campus on weekends or on vacation, including the summer months.

# **The Counseling Center**

The Counseling Center is located in the office complex, 300, third floor, Hearnes Hall. The services of the Center are available without cost to Missouri Southern College students.

Assistance is offered the student in dealing with personal, educational and vocational problems which may keep him from making optimum use of his potentialties while in college. A professionally

trained counselor will work with the individual to assist him in integrating personal, educational, and vocational aspects of this life into a pattern which is meaningful and satisfying.

#### **Veterans**

The College is approved by the Veterans Administration to offer programs for veterans eligible under the provisions of Public Laws No. 894 and No. 550, and for those attending under the War-Orphans Act; Public Law 634.

#### **Selective Service**

College Student Certificates (Form 109) are completed by all male students at time of registration, except those who have completed their military service obligation. These forms will be available to draft boards so the students currently enrolled may request educational deferment.

#### STUDENT AFFAIRS

Opportunities for participating in a wide variety of out-of-class activities are provided at Missouri Southern College. Students are encouraged to investigate the wide choice of activities and are invited to participate in one or more of these aspects of the College program.

**Student Senate.** The responsibility for student government rests not only with the student officers and student boards and committees but also with each member of the student body. The growth and development of Missouri Southern College student government will be proportionate to the participation by the students.

The Student Senate serves as the governing body for students and acts as an intermediary between the faculty and student body. Members of the Student Senate gain experience in the functions of a student government and strive to promote the objectives of the Student Body Constitution. Duties of the Senate include the allocation of Student Activity funds to the various college organizations, the publication of a student directory and the student handbook, and the promotion of student activities, such as dances, parades, and assemblies.

The membership of the Student Senate consists of the Student Body Executive Officers, the officers from each class, and a number of senators representing each class. The student body executive

officers for the summer cabinet for the following year are elected late each spring. The class officers and student senators are elected early each fall. Interested students petition and campaign for office. The number of senators each class may have in the Student Senate is proportionate to the number of students in each class.

Student Cabinet. The Student Cabinet organized each spring is composed of a representative from each authorized student organization together with the student senate officers. This group acts in an advisory capacity to the student body president during the summer and the next regular school year. In addition, the Student Cabinet functions as a service committee from the end of the spring term until the time that the senate is fully organized in the following fall. During the summer months the Cabinet assumes the power and duties of the student senate; thus, it is often referred to as "The Summer Cabinet." At the beginning of each new school year, the Cabinet helps with the orientation program for new students; and before the Cabinet retires to its advisory role, it is responsible for conducting the elections of class officers and of student senators.

#### STUDENT ORGANIZATIONS

The College encourages student organizations which provide for the professional, social, academic, divisional, religious, political, or service interest of the students. New organizations may be established when approved by the Student Government and the College administration.

#### **Student Government**

Senate Mr. Stegge, Mr. Junkins, I	Miss Wilson
Summer Cabinet Mr. Stegge, Mr. Junkins,	Miss Wilson
Association of Women Students	Miss Wilson
Advisory Board to Women's Organizations	Miss Wilson

#### Classes

Senior Class	Dr. Schuster, Miss Wolfe
Junior Class	Mr. Bingman, Mrs. Bowman
Sophomore Class	Mrs. Hunt, Mrs. Bryant
Freshman Class	Mr. Junkins, Miss Wilson, Mr. Karst

### **Departmental Groups**

· ·	
Art Club	Mr. Dishman
Biology Club	Dr. Orr, Mr. McConnell
Business Club	Mr. Carpenter, Mr. Larimore
College Players	Mr. Brietzke, Mr. Hunt

Engineers Club	Miss McCormick, Mr. Cragin
English Club	Miss Wolfe, Miss Blades
	Mr. Jensen, Miss McCormick
	Mr. Kelly
	. Mr. Colon, Miss Hollingsworth
	Dr. Dryer, Dr. Guilliams
	Mr. Eli, Mr. Gubera
	ciation . Dr. Dryer, Mr. Easterday
	tion) Dr. Twenter, Miss Yount
	Mr. Mason, Mr. Adams
	Mrs. Jacobs
Traising Clas	
Honor Groups	
	Mrs. Mitchell, Mr. Martin
	Mrs. Mitchell, Mr. Martin
Phi Theta Kappa	Mrs. Mitchell, Mr. Martin
Phi Theta Kappa  Religious Organizations Baptist Student Union	Mrs. Mitchell, Mr. Martin
Phi Theta Kappa  Religious Organizations  Baptist Student Union Ecumenical Council	Mr. Unser
Phi Theta Kappa	
Phi Theta Kappa  Religious Organizations  Baptist Student Union Ecumenical Council	Mr. Unser
Phi Theta Kappa	Mr. Unser
Phi Theta Kappa	Mr. Unser iation . Mrs. Ditto, Mrs. Bowman

United Nations . . . . . . . . . . . Mrs. St. Clair, Mr. Ahmed

Circle K Club ...... Mr. Landrith, Mr. Volmert Flying Club . . . . . . Mr. Lowery Rotaract . . . . . Dr. Belk Young Democrats Club . . . . . . . . . . . . . . . . . Mr. Fore Young Republicans Club ..... Mr. Gockel

#### Student Interests

The Chart staff publishes 18 issues of the College newspaper. Throughout the year the editorial division uses the work of many reporters, feature writers, cartoonists, and typists. The business staff offers experience in advertising, salesmanship, and secretarial practices. Those wishing to freelance should attend weekly staff meetings.

The Crossroads (The College Yearbook) is produced by a student staff with faculty sponsors. The annual Crossroads Ball is climaxed by the crowning of the Crossroads Queen. Students who work on the yearbook staff receive valuable experience in school publications.

Music. Participation is offered to students by five musical organizations. Choir and Vocal Ensemble are open to all students with consent of the director. Auditions for the Choir are held at the beginning of each semester. Activities include concerts, performances for civic clubs and area schools, and tours. The Vocal Ensemble is a small select group that performs for civic programs and at special recitals.

The Concert Band, Stage Band, and Symphony Orchestra are offered to all students who have the instructor's consent. Concert Band performances include two major concerts each year. The Stage Band is a limited membership group with activities that include at least two formal appearances each year, participation in Jazz Festivals, performances at assemblies, and for civic groups. The Symphony Orchestra is composed of outstanding college instrumentalists and area adult musicians. The group will give five concerts each school year, performing standard orchestral literature.

**Athletics.** Missouri Southern College, having become a four-year institution as defined by athletic associations, has received membership in the National Association of Intercollegiate Athletics. The college participates in the following intercollegiate activities: basketball, football, track, golf, and tennis.

To be eligible for participation, students must meet the scholastic requirements of the NAIA.



#### Admissions

### **Admission Requirements.**

By Graduation from Accredited High Schools.

- As a state-supported institution, Missouri Southern College by state law admits all graduates of Missouri high schools accredited by the State Department of Education. Applicants with previous college work are not eligible under this provision.
- 2. A student entering from out of state must rank in the upper two-thirds of his high school graduating class.

### By Examination.

- Applicants not eligible for admission on the basis of graduation from an accredited high school may be considered for admission on the basis of examinations. Arrangements should be made with the Director of Guidance and Testing.
- Persons of high school age are not eligible under this provision.

By Advanced Standing (Transfer) from Accredited Colleges.

- Students applying for admission as transfer students from other collegiate institutions must have official transcripts sent to the Director of Admissions by the Registrar from each institution attended. These transcripts become the property of Missouri Southern College.
- 2. Students who are ineligible to return to their last institution will not be admitted to Missouri Southern College.
- Students seeking admission from other colleges with 55 transfer credit hours or more, must present a minimum C (2.0 on A=4) average.

### Credentials Required for Admission.

Students applying for admission to the lower division are required to furnish credentials as follows:

- High School Transcript. An official transcript or transcripts of high school credits showing that he has met requirements for graduation.
- College Transcripts. Official transcripts and statements of honorable dismissal from each institution attended after high school graduation.

- Application. An application for admission which must be filed with the Director of Admissions before the deadline as specified in the College calendar.
- Application Fee. A fee of \$5.00 with the application for admission. (This fee is non-refundable and non-applicable to other college fees.)
- 5. Physical Examination. A certificate of health filled out and signed by both the applicant and his doctor.
- 6. Placement Tests. Scores from the Missouri College English Test (MCET), Missouri Mathematics Placement Test (MMPT), and the School and College Ability Test (SCAT). (These tests are administered by colleges throughout the State of Missouri both during the spring and summer of each year. In unusual circumstances the tests may be administered by appointment at Missouri Southern College.)
- 7. Applicants for Admission to Nursing Program. Students who plan to enroll in the nursing program, in addition to supplying the above credentials, must take an Entrance Examination for Schools of Nursing, and must have an interview with the Director of Nursing.
- 8. Veterans who plan to attend under the G.I. Bill of Rights or veterans' orphans under the War Orphans Act must present a certificate of eligibility at the time of registration.

Students entering the upper division must meet the following special requirements:

- Continuing students at Missouri Southern College need not re-apply to the College but must inform the Registrar's Office of their intention to return.
- Former Joplin Junior College students will be required to up-date their credentials.
- Transfer students must complete the regular credentials listed above.

#### **International Students**

Students not citizens of the United States, who wish to apply for admission, should write the Director of Admissions, Missouri Southern College, for the proper application forms and instructions. Three basic concerns apply to international student applicants: 1) Academic competency; 2) Ability to read and speak the English language adequately for college level study; and 3) Ability to finance the cost of education at Missouri Southern College. All applicants from non-English speaking countries must pass the Test of English as a Foreign Language.

### **Transcript of Record**

An official transcript of the student's academic record bears the registrar's signature and the college seal. Missouri Southern College assumes no responsibility for the accuracy of a transcript after it leaves the registrar's office.

Up to two weeks must be allowed after the close of a semester for the issuance of an up-to-date transcript. The transcript request must be made in writing. Each student is entitled to two (2) free transcripts. Additional copies cost \$1.00 each. No transcript will be issued unless all bills to Missouri Southern College are paid or are current according to agreement with the business office.

### **Grade Reports**

Grade reports are normally available within one week after the semester closes.

### **Academic Advising**

Academic advising is regarded by the college as an extension of the teaching function and an important responsibility of the faculty. The student also is responsible to study the requirements of his educational program carefully and work closely with his adviser.

Freshmen students are advised by counselors of the Student Personnel Services. Those who have or will have completed 29 or more semester hours in their current semester will be assigned to and advised by a subject matter professor at the time he pre-enrolls for the next semester.

### **Course Numbers and Levels**

### Course Numbers:

- 0 99 Not applicable toward baccalaureate degree.
- 100 199 Primarily for freshmen.
- 200 299 Primarily for sophomores.
- 300 399 Primarily for juniors.
- 400 499 Primarily for seniors.

Normally courses numbered 100 - 299 are considered junior or lower division level courses, and those numbering 300 - 499 are senior or upper division level courses. There are more significant distinctions between the sophomore and junior years than within the levels of the lower or upper divisions.

Hyphenated numbers (101-102) represent sequence courses, both parts of which must be taken to receive credit. Comma courses

(101, 102) sometimes permit taking either semester for credit, but usually allow credit for the first semester without taking the second. The student should check the catalog description of the course to see whether the second semester of a sequence course makes the first semester prerequisite.

Freshmen are not permitted to take any course above the two hundred level unless qualified by advanced placement tests. The exception is infrequent.

### CLASSIFICATION OF STUDENTS

Freshman: 0 - 28 hours Sophomore: 29 - 55 hours

Junior: 56 - 89 hours Senior: 90 and above

Special: Non-degree students, usually 21 years of age or over, admitted on the basis of maturity and ability, but who fail to meet regular-standing requirements or who plan to study for personal improvement only. These may qualify for regular standing by removing entrance deficiencies and by earning a minimum C (2.0) average. Normally, there is a 32-hour limit. Credits earned as a special student may apply toward a degree when regular standing is attained and if the credit earned is regularly applicable toward a degree. Students who have attempted a degree program and have failed to maintain normal progress toward graduation may, at the discretion of the proper college authorities, be directed into non-degree, occupational preparation programs as special students.

Post Graduate: Persons having completed a degree but taking courses for purpose of teacher certification, job preparation, an additional degree, or personal profit.

Transient: Students in good standing at other colleges and universities wishing to enroll at Missouri Southern College for the purpose of transferring back to their institutions the credit earned. Admission requires completion of the application form, payment of the \$5.00 application fee, and a statement of good standing from the Dean or Registrar of the student's home college or university.

Full-time: A student enrolled for 12 or more semester hours. Part-time: A student enrolled in 11 or less semester hours.

### **GRADING SYSTEM**

Grade Points
A — Excellent
B — Superior
C — Average
D — Minimum Passing 1
F — Failing
W — Withdrawal 0
I — Incomplete
Au — Audit (registration without credit)
Cr — Credit (course passed with no specific grade)

An incomplete must be made up within the time arranged by the instructor, not to exceed one semester, or it will be automatically converted to F. Both credit and grade points are suspended until the incomplete (I) is converted to either a passing grade or an F.

A grade point average (GPA) at the end of any semester is the total number of grade points earned divided by the total number of hours attempted.

### MINIMUM STANDARDS OF PROGRESS

A student's cumulative grade point average (GPA) is used to evaluate his progress. If a student's grade point average falls below the minimum standards of progress, his work is considered unsatisfactory.

Minimum progress toward a degree is computed on the following minimum grade point averages:

0 - 17 credit hours					1.5
18 - 32 credit hours					1.6
33 - 44 credit hours					1.75
45 - 55 credit hours					1.9
56 to Graduation					2.0

### ACADEMIC WARNING AND PROBATION

A student who is making unsatisfactory progress will be issued an academic warning and placed on probation for one semester. During the semester on probation, he must raise his grade point average to the level prescribed in the minimum standards of progress. If he does not raise his cumulative grade point average to the required standing by the end of the probationary semester, he may petition for one additional probationary semester. The additional semester will not be automatically granted, but each petition will be judged on its own merit.

### SUSPENSION AND REINSTATEMENT

Two successive probations, with failure to meet minimum standards of progress toward graduation, are sufficient reason for dismissal from College. The student is suspended for one semester after which he may petition the Committee on Academic Standards for re-admission. Re-admission will be considered only in cases where the student can present evidence to the Committee that indicates positive change in motivation suggesting a high probability of future academic success. The grade points needed to reach minimum progress toward graduation must be within the student's capability.

Except for freshmen completing the first semester, a student whose cumulative grade point average is less than 1.0 will be automatically suspended from college. The freshman may petition the Committee on Academic Standards immediately for reinstatement on academic probation.

The College reserves the right to suspend any student whose performance gives evidence that he cannot continue with profit to himself and credit to the institution.

### REPETITION OF COURSES

A course in which a student has made a grade of D or F may be repeated only once. The grade and grade points earned in the first attempt will be cancelled and the second grade will be used in computing grade point averages.

### STUDENT COURSE HOUR LOAD

Registration for 12 or more semester credit hours gives full-time standing, and 15 or 16 hours constitutes a normal study load. An average of 15 credit hours for four semesters and 16 for four semesters enables the student to meet the minimum 124 credit hour requirement for a baccalaureate degree in eight semesters (four academic years).

Permission to carry 17 credit hours may be granted if the student's accumulative grade point average is 2.0 or above. In order to carry 18 or more credit hours the student must secure the approval of the Dean of the College through use of a "Petition for Additional Hours." Approval to carry 18 hours or more will be considered if the grade point average is 3.0 or more, freshmen orientation excluded.

In planning a course load, the student should remember that for each hour of credit two hours of study are required per week. A 16-hour load means that a student is committing himself to a 48-

hour academic week: 16-18 hours in class, and 32 hours of preparation. The student should carefully measure the demand on his time for money-earning jobs, extracurricular activities, participation in collegiate sports, drama and musical productions, social activities and other time-consuming activities when planning his class schedule.

### **CLASS ATTENDANCE**

The primary objective of student and professor is the student's attainment of course goals. It is recognized that normally those students who achieve well are regular in class attendance. The professor, when giving a final semester grade, bases his evaluation on how well the student has achieved the course goals.

The student who misses a class does it at his own risk. He must assume the responsibility for work missed because of class absences. Professors are willing to assist students whose absences are caused by valid illnesses, college approved activities, and extenuating circumstances. The professor may require whatever evidence he needs to support the reason for absence. If a student is absent two class meetings more than the credit hours of the course, regardless of the reason, the professor can request that the student be dropped from the course.

Because the attendance record is significant to the total record and useful in guidance and counseling, the professor keeps a record of individual class attendance. When he believes the absences are excessive he will report the fact to Student Personnel Services and they in turn will counsel with the student. The total number of student absences in a class will be reported to the Registrar's office along with the final grade at the end of the semester.

The student should be aware that absenting himself from class invariably has a built-in penalty of lower academic achievement. Excessive absences usually result in failure to achieve the course goals.

### **CORRESPONDENCE AND EXTENSION**

A maximum of 12 semester hours of credit by correspondence or extension study from approved institutions may be considered for transfer.

### STATE LEGISLATION REQUIREMENT

Sections 10373, 10374, 10374a, 10374b, 10374c (S.C.S. for S.B.4) of the Laws of Missouri, 1947 (6th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and

"satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American institutions."

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to senior college work, or (2) by certification of the completion of such requirements in another collegiate institution.

All students who have completed the general education curriculum requirements in Area 2, or who have completed an American history course covering and including the constitutional period plus a course in State Government, or Missouri History and Government, or pass a special examination on the new Missouri Constitution, meet the requirements of Missouri law.

### WITHDRAWAL FROM COURSES

If a student officially withdraws from a course during the first week of classes, no entry will be made on the permanent record. If official withdrawal is made after the first week and before the end of the twelfth week of classes, a mark of W is entered on the record. Withdrawal from a course after the twelfth week results in a grade of F. Exception to the F grade will be considered only on extenuating circumstances beyond the student's control and only by special permission from the Dean of the College.

### WITHDRAWAL FROM COLLEGE

Except at the end of a semester or regular school session, any student who withdraws from Missouri Southern College must obtain a "Withdrawal from School Permit" from the Student Personnel Office. When this form is completely processed, the student will report to the Registrar's Office for final withdrawal. If all records are clear, the student is honorably dropped from the College and is eligible to return, subject to minimum standards of progress regulations.

A student who leaves the College without completing the "With-drawal from School Permit," except at the end of a semester or a regular school session, will not be eligible to re-enter the following semester.

### **AUDITORS**

With the consent of the chairman of the division and the instructor concerned, a student may be admitted to a course as an auditor. Auditors must be registered and pay fees as a regular or special student. They receive no college credit.

### ADVANCED PLACEMENT

To seek advanced standing or college course credit, the high school applicant must take the Advanced Placement Examination of the College Entrance Examination Board in the field of study for which he may qualify. Students who have taken an Advanced Placement course in high school and who have passed the National Advanced Placement Examination in that course at a 3-point level or higher are automatically eligible for placement at the next level of the college sequence and may receive college credit. A Bulletin of Information for Students is available through the high school or the College Board Advanced Placement Examinations, Box 592, Princeton, New Jersey 08540.

Students who have been out of high school and have had varied study programs, or who have had college study that needs validating, may ask the Director of Guidance and Testing at Missouri Southern College for the privilege of taking the College Level Examination Tests of Educational Testing Service. The quality of performance on the tests will determine whether advanced standing or credit can be given. Write the Director of Guidance and Testing, Missouri Southern College, Joplin, Missouri 64801, for details and information on subject matter areas for which tests are available.

### TRANSFER CREDIT

The maximum credit that a student may present from a junior college toward advanced standing is 64 semester hours.

Upper division courses carrying a grade of D will not be accepted for credit at Missouri Southern College.

Transfer students must take in residence at Missouri Southern College a minimum of one-half the credit hours required in the major field of study.

Transfer students must also take the senior year or 30 out of the final 36 hours in residence at Missouri Southern College.

### **DEGREES AND GRADUATION REQUIREMENTS**

### **Degrees**

Missouri Southern College has two distinct divisions, junior and senior (or lower and upper), both directed by the same Board of Regents, Administrators, and Faculty. Baccalaureate degrees are offered by the senior college division and associate degrees are offered by the lower division.

The baccalaureate degrees offered are the Bachelor of Arts, Bachelor of Science and Bachelor of Science in Education.

The associate degrees offered are Associate of Arts and Associate of Science.

The Certificate of Achievement is offered for one year of successful study in the secretarial-typist curriculum.

The Bachelor of Arts degree is available with majors in art, English, history, music, political science, psychology, sociology, Spanish, and speech and drama.

The Bachelor of Science degree is available with majors in biology, business administration, chemistry, mathematics and medical technology.

The Bachelor of Science in Education degree is available in elementary education, and in the following areas for those planning to teach at the secondary level: Art, biology, business, chemistry, English, foreign language (Spanish), mathematics, music, health, physical education and recreation, physics, speech and drama, social science (with concentrations possible in history, political science, or sociology).

The Associate of Arts degree is available in pre-agriculture, pre-dental, pre-engineering, pre-journalism, pre-medical, pre-optometry, and pre-pharmacy.

The Associate of Science degree is available in general business, accounting, data processing and computer programming, electronic data processing coordinator, computing analysis, secretarial science, nursing, automotive technology, drafting and design, machine technology, and law enforcement.

The Associate of Arts degree curricula are normally considered Junior College transfer curricula.

### Majors

The subject matter area of concentration is called a major. See paragraphs above for listing of the majors offered. The requirements for each major are explained immediately preceding the course descriptions for each department, beginning with page 63.

### **Graduation Honors**

In recognition of superior scholarship, the college awards honors to associate degree and baccalaureate degree graduates as follows:

Associate Degree. The student must have completed a minimum one half of the hours required for the degree in residence at Missouri Southern College. The cumulative grade point average required to receive First Honors is 3.75; Second Honors, 3.65, and Third Honors, 3.50.

Baccalaureate Degree. Cum Laude is awarded those students who have a cumulative grade point average of 3.3. Eligibility for the honor also requires that the student study all his junior and senior years at Missouri Southern College and earn a minimum of sixty semester hours of credit.

Magna Cum Laude is awarded those students who have a cumulative grade point average of 3.7. Eligibility for the honor also requires resident study at Missouri Southern College throughout the 124 credit hours required for graduation.

Summa Cum Laude is awarded those students who have a cumulative grade point average of 3.85. Eligibility for the honor also requires resident study at Missouri Southern College throughout the 124 credit hours required for graduation.

### **Requirements for Graduation**

The degree requirements in this catalog, 1969-1970, become effective June 1, 1969.

A candidate for a degree may use as a basis for degree requirements the general catalog issued for any year following the date of his first registration in the College, so long as it is not more than five years prior to the date the degree is to be conferred. The candidate must have been in residence during the year of the catalog selected.

### **Baccalaureate Degrees**

Residence — The student must have earned thirty out of the final thirty-six semester hours in residence at Missouri Southern College. (This regulation does not apply to three-one affiliation programs.)

Credit Hours — At least one hundred twenty-four semester hours of college credit applicable to a baccalaureate degree are required to qualify for graduation.

Grade Point Average — A 2.0 cumulative grade point average on all credit hours attempted is required. The courses making up the major field of study must also carry a 2.0 or above. See the Department of Education for the special requirements in the Teacher Education Program.

Upper-Division Hours — A minimum of forty semester hours in upper division courses (those with numbers in the 300's and 400's) must be presented to meet the graduation requirements. Reasonable adjustments are made for three-one affiliation programs.

Time of Graduation — A student may complete graduation requirements at the close of any semester. Formal announcement of graduation is made and degrees are conferred at the close of the spring semester. All students completing graduation requirements since the preceding commencement are expected to participate in the commencement activities.

Major Field — A minimum of 12 upper division credit hours must be earned in the major field. The grade point average for courses making up the major must be 2.0 or above. A minimum of 15 semester hours must be taken at Missouri Southern College.

**Placement Services** — Each degree candidate must file credentials in the Placement Office.

Degree Candidacy Application — Each student must make application for degree candidacy when pre-registering for his final semester in the school year in which he is to receive his degree. The application form is available in the office of the Registrar.

**Educational Methods Courses** — These courses, including student teaching, are applicable only to the Bachelor of Science in Education Degree.

Correspondence and Extension Credit — A maximum of twelve semester hours of correspondence and extension credit may be considered for admission to the degree.

**State of Missouri Requirement** — All candidates for a degree must satisfactorily complete a course in United States History including a study of institutions and national and state governments. This requirement may be satisfied by History 110 or 120 and Political Science 120 or 210. Education majors must take History 110 and 120.

# **General Education Requirements Baccalaureate Degree**

Area 1. Basic Skills		
*English 101-102, English Composition	6	hours
Select one:	3	hours
Speech 100, Speech Techniques 3		
Speech 202, Public Speaking 3		
Select one:	3	hours
**Math 110, Introduction to College Math 1 . 3		
**Math 130, College Algebra 3		
Total for Area 1	12	hours
tudents who qualify for Eng 111 satisfy the composition		:

<sup>\*</sup>Students who qualify for Eng 111 satisfy the composition requirement with this course.

<sup>\*\*</sup>Higher level mathematics courses also satisfy this requirement.

Area 2. Social Sciences	
History 110 or 120, History of United States	3 hours
*Psychology 100, General Psychology	3 hours
Select one:	2 hours
Political Science 120, U. S. Government 3 Political Science 210, State and Local Government 2	
Select one:	3 hours
History 200, Western Civilization	
History 331, Economic History of U.S 3 Economics 202, Principles of Economics 3 Geography 211, Regions and Nations 3 Sociology 110, Introduction to Sociology 3	
Total for Area 2	11 hours
*Education and Psychology majors should substitute Psy chology of Human Development for this requirement.	110, Psy-
Area 3. Humanities and Fine Arts	
Select one of each:	
English 120 or 130, World Masterpieces 3 English 210 or 220, English Literature 3 Select one:	6 hours 3 hours
English 210 or 220, English Literature 3	
English 210 or 220, English Literature 3 Select one:	3 hours
English 210 or 220, English Literature 3 Select one:	3 hours 10 hours 9 hours
English 210 or 220, English Literature 3 Select one:	3 hours  10 hours  9 hours  19 hours

Area 4 Natural Sciences

Area I. Hatarar berefrees	
Select one: 5	hours
Biology 100, General Biology 5	
Or any five hour course in Biology 5	
Select one: 5	hours
Physics 100, Fundamentals of Physical Science 5	
Or any five hour course in Chemistry,	
Geology, or Physics 5	
Total for Area 4	hours

### Area 5. Health and Physical Education

*HPER 101-102, Introduction to Physical Activity	2 hours
**HYPER 160, Personal Health	2 hours
Or 2 additional hours of activity courses may be	
substituted for HPER 160	
Total for Area 5	4 hours

<sup>\*</sup>Physically restricted students may take HPER 100.

All freshmen must enroll each semester in English and Physical Activity until the general education requirements in these areas are fulfilled.

A qualified student may substitute a more advanced course in any area above with the permission of the department responsible for the general education course.

### **Associate of Arts Degrees**

**Credit Hours** — A minimum sixty-two semester hours must be completed.

**Residence** — The last fifteen semester hours must be completed in residence at Missouri Southern College.

Grade Point Average — Minimum cumulative and major field grade point average must be 2.0.

Major Field — The student is required to meet the course requirements in the particular program he selects as approved by his adviser.

General Education Requirements — The degree requires completion of the general education requirements as well as the courses in the major field of study. The required general education courses are:

<sup>\*\*</sup>Education majors must take a health course, either HPER 160 or HPER 370.

Area 1. Basic Skills	
*English 101-102, English Composition	6 hours
Speech 100, Speech Techniques	3 hours
Select one:	3 hours
Total for Area 1	12 hours
*Students who qualify for Eng 111 meet the composition ment with this course.	
**Higher level mathematics courses also satisfy this require	ment.
Area 2. Social Sciences	
History 110 and 120, History of United States	6 hours
Select one:	3 hours
Political Science 120, U.S. Government 3 Political Science 210, State and Local Government 2 History 200, Western Civilization 3	
History 202, Modern European History, 1815 3 Geography 211, Regions and Nations 3 Psychology 100, General Psychology 3 Sociology 110, Introduction to Sociology 3 Economics 202, Principles of Economics 3	
Total for Area 2	9 hours
Area 3. Humanities and Fine Arts	
Select one:  English 120, World Masterpieces	3 hours
Select one:	3 hours
Music 110, Music Appreciation	
Total for Area 3	6 hours

Area 4. Natural Sciences

Any biological or physical science	5 hours
Total for Area 4	5 hours

rea 5. Health and Physical Education	
Select one:	2 hours
Activity 2	
HPER 160, Personal Health	
Total for Area 5	2 hours

### **Associate of Science Degree**

Credit Hours - A minimum of sixty-two semester hours must be completed.

Residence — The last fifteen semester hours must be completed in residence at Missouri Southern College.

Grade Point Average - The minimum cumulative and major field grade point average must be 2.0.

Major Field — The student must meet the course requirements in the particular program of study he selects as approved by his adviser.

General Education Requirements — The degree requires completion of the general education courses as well as those outlined in his major field of study. The general education required courses are:

### Area 1. Basic Skills

*English 101, English Composition	3 hours
Select one:	3 hours
**Math 20 and 30, Programmed Course in Beginning and Intermediate Algebra 3	
**Math 110, An Introduction to College Mathematics 3	
Total for Area 1	6 hours

\*Students who qualify may take Eng 111 to meet this requirement.

\*\*Higher level mathematics courses also satisfy this requirement

Area 2. Social Sciences	
Select one:	3 hours
Select one:	3 hours
Total for Area 2	6 hours
Area 3. Humanities and Fine Arts	
Select one:	3 hours
Total for Area 3	3 hours
Area 4. Natural Sciences	- h
Select one:	5 hours
Total for Area 4	5 hours
The state of the s	
Area 5. Health and Physical Education	0.1
Select one:	2 hours
Total for Area 5	2 hours
*Physically restricted students may take HPER 100.	

### THE CURRICULUM

# DIVISIONAL ORGANIZATION AND OBJECTIVES

The college is organized into six divisions each of which has a chairman as its executive. The divisions are subdivided into departments. The divisions and departments are under the administrative supervision of the Dean of the College.

The divisional objectives and programs are as follows.

- **I. Division of Business and Economics** (Departments of accounting, economics, general business, marketing and management, and office administration):
- (1) Preparing individuals for positions of responsibility and leadership in industry and government; (2) Preparing individuals to teach business subjects on the secondary level; and (3) Preparing individuals to enter the business community, obtain initial employment, and perform effectively on the operative level in an organization.

It is the primary purpose of the Division of Business and Economics to continuously develop and improve the caliber of instruction, programs, and courses which will achieve these objectives and, thereby, fulfill the educational needs and goals of the individuals previously mentioned.

The Division of Business and Economics offers two baccalaureate degrees — the Bachelor of Science in Business Administration (three approaches: Accounting, General Business, Marketing and Management) and the Bachelor of Science in Education with a major in business (two plans). In addition, several short-term business programs are offered; they are described under Semi-Professional and Technical Curricula.

- **II. Division of Education and Psychology** (departments of education: elementary and secondary, health-physical education and recreation, and psychology):
- (1) To assist the prospective teacher in developing skills and understanding essential for entrance into the teaching profession; (2) To lead the student into the development and maintenance of good physical and mental health; (3) To teach creative and beneficial leisure-time activities that will serve the student throughout life.

The Division provides specific course work leading to the degrees of Bachelor of Science in Education and the Bachelor of Arts with a major in psychology. The Department of Education carrries the responsibility for teaching and coordinating the professional education sequence of courses. The Department of Health-Physical Education and Recreation serves the basic physical education requirement of all students, and supervises the women's and men's intramural sports programs.

III. Division of Humanities and Fine Arts (departments of art, English, foreign languages, journalism, music, philosophy, and speech and drama):

The Division of Humanities and Fine Arts comprises those areas of learning in which the student is made aware of some of mankind's greatest thought and noblest art. Through the study of art, journalism, language, literature, music, philosophy, speech, and drama, the student enlarges his capacity to express himself and at the same time develops his ability to comprehend and appreciate the creative efforts of others.

The seven separate, but related, departments of the Division are concerned with creative self-expression, although distinct in that each is a specific discipline or area of study.

- A. Viewed in relation to the total college curriculum, the functions of the departments comprising the Division are twofold:
- 1. General Education Certain courses offered in every area of Humanities and Fine Arts are especially designed to make available to each student skills and understanding which greatly add to his personal development, regardless of his specialization. (a) Through courses in English, journalism, and speech he will increase his ability to read, write, and speak his own language and deepen his understanding of its literature. In journalism he will also learn techniques of reporting and styles of writing appropriate to today's mass media. (b) By studying foreign languages, he will learn to communicate with people of other nations and to appreciate the intellectual contributions of cultures other than his own. (c) Through participation in drama, he will develop poise and power of oral expression. (d) In a guided study of the masterpieces of music and art, he will learn to enjoy and appreciate world treasures. (e) In philosophy, he will become familiar with the problems of knowledge, the natural world, and society, and with the guest for the good life.
- 2. Major or Area of Concentration To achieve a high level of competency in his special interests, a student elects an area of concentration. (a) Programs in art, English, foreign languages, speech,

#### THE CURRICULUM

drama, and music form major areas for candidates for the Bachelor of Science in Education degree. (b) A lesser concentration in several of these areas is required for a Bachelor of Science in Education degree with a major in elementary education. (c) Students not planning to teach but desiring competency in an area may elect to receive a Bachelor of Arts degree for personal enrichment or as preparation for graduate study.

- B. In addition to curricular functions, the Division exerts a strong influence upon the cultural life of the college and community.
- 1. The musical and dramatic performing organizations offer opportunities for participation to all qualified students, thus serving as a valuable outlet for aesthetic self-expression.
- 2. The regular publication of the college newspaper, The Chart, not only provides practical experience for students interested in journalism, but also serves the college community and alumni with reports of college activities.
- 3. A creative arts publication written and edited by MSC students, under the sponsorship of the Humanities and Fine Arts Division, serves the dual purpose of providing an outlet for artistic and literary expression and practical experience in the editorial functions associated with publishing. Through this medium, young writers and artists may not only gain experience in the development of their talents, but also enrich the cultural resources of the college community. This is an opportunity that they and their editors have for speaking to and for the other students, and, at the same time, for interesting, entertaining, and influencing all at MSC.
- 4. Displays of art works by students and faculty in the Art Gallery and in the exhibits sponsored by Spiva Art Center, housed in the Gallery, stimulate the artistic community.
- 5. The services of members of the faculty of all departments to community organizations professional, cultural, and civic aid in acquainting the public with the programs of the college.
- IV. Division of Natural Sciences and Mathematics (departments of biology, chemistry, geology, mathematics, and physics):

To support the purposes and objectives of the college by correlating the various departments of science and mathematics in order to aid the student to: (a) become more knowledgeable about

the biological and physical aspects of the earth and universe; (b) understand and use the scientific method; (c) gain a comprehensive understanding of subjects for teaching (if teaching is the goal); have a broad base of learning and understanding, regardless of the major field of study selected, through general education courses. The division also meets needs of students preparing for engineering, dentistry, medical technology, medicine, and nursing.

V. Division of Social Sciences (departments of geography, history, political science, and sociology):

The Division of Social Sciences' purposes are to provide the student with the skill, attitudes, and understanding necessary to give life direction and meaning; to encourage the student to think and to evaluate the broad issues of life; and to stimulate his acquiring new interests that he may pursue for the sheer pleasure of learning.

The division has a special concern in the preparation of social science teachers for the schools of Missouri and the undergraduate education of students who are planning careers in government and community service.

The objectives of the division are:

- 1. To prepare students for certification as social science teachers in the elementary and secondary schools.
- To provide the undergraduate education needed for students desiring to continue graduate work in history, political sciences or sociology.
- 3. To provide a program of extracurricular activities that aid in introducing the student to his future role of service to community and nation.
- VI. Division of Semi-Professional and Technical Education (departments of automotive technology, computer science, drafting and design, law enforcement, machine technology, and nursing):
- (1) To provide opportunity for post-high school education for students seeking skills preparing them for employment, but who do not wish to pursue a baccalaureate degree; (2) To give both specialized instruction and general education in sufficient balance to prepare for living as well as working in society. Students enrolling in the specialized courses of this division should know that most of them are not applicable toward a baccalaureate degree if he should later decide to seek it.

#### THE CURRICULUM

### **DEPARTMENTS AND THEIR SYMBOLS**

The courses of instruction are divided by subject matter or departments. Each course carries a number. When reference is made to a particular course, or when the class schedule for a given semester is constructed, entries similar to the following are made: Eng 101 English Composition. Many times only the departmental abbreviation and number are used such as "Eng 101." Below are the names of the departments and their abbreviations.

Accounting Acct
Art Art
Automotive Technology Auto
Biology Bio
Chemistry Chem
Computer Science Comp
Drafting & Design DD
Economics Econ
Education Educ
English Eng
Foreign Language
French Fren
German Ger
Spanish Span
General Business GB
Geography Geog
Geology Geol
Health, Physical
Education & Recreation HPER

History Hist
Journalism Jour
Law Enforcement LE
Machine Technology MT
Marketing & Management MM
Mathematics Math
Music Mus
Nursing Nur
Office Administration OA
Philosophy Phil
Physics Phys
Political Science PSc
Psychology Psy
Sociology Soc
Speech & Drama
Drama Dr
Speech Spch



### COURSES OF INSTRUCTION

### **ACCOUNTING**

#### **Division of Business and Economics**

Goode, Hatfield, Stengel, Stone

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Accounting approach. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

The requirements for the Semi-Professional and Technical Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 143.

101, 102 — Elementary Accounting (per sem.) 3 hrs. cr.

(101) Fundamental principles of accounting as applied to modern business practice. Analysis of balance sheets and income statements; (102) Continues Accounting 101 with emphasis on corporation accounts. 101 is prerequisite to 102.

211 — Cost Accounting

Study of accounting control with management emphasis as applied to industrial enterprise. Special emphasis on product costs and cost systems. Prerequisite: Acct 102.

3 hrs. cr.

212 — Intermediate Accounting I 3 hrs. cr.

A continuation of corporation accounting including a detailed study of the fundamental process with emphasis on current assets, current liabilities, and noncurrent investments. Prerequisite: Acct 102.

301 — Intermediate Accounting II 3 hrs. cr.

A continuation of corporation accounting, including noncurrent balance sheet accounts (tangible and intangible assets, long-term liabilities, and stockholders' equity) and special statements and analyses. Prerequisite: Acct 212.

302 — Advanced Accounting 3 hrs. cr.

Application of accounting principles to partnerships, installment and consignment sales, receiver's accounts, estates and trusts, and consolidating statements. Prerequisite: Acct 301.

401 — Tax Accounting 3 hrs. cr.

Procedures for reporting federal income taxes with emphasis on income and deductions for individuals. Practice is given in preparing federal income tax returns. Prerequisite: Acct 102 or permission.

#### **COURSES OF INSTRUCTION**

#### 402 — Advanced Income Tax

3 hrs. cr.

Income tax regulations that apply to partnerships, corporations, estates, trusts, foreign, gift, and social security taxes. Practice is given in preparing the federal tax returns. Prerequisite: Acct 401.

411 — Auditing

3 hrs. cr.

The procedures involved in preparing an audit of the various accounts of a business enterprise. Prerequisite: Acct 301.

491 — Internship in Public Accounting

3 hrs. cr.

Selected senior accounting students serve an internship of approximately six weeks as junior accountants on the staff of practicing certified public accountants. The program is supervised by the faculty. An oral and written report is required. Prerequisites: Acct 301, 401, 411 and/or consent of the internship committee.

### ART

#### Division of Humanities and Fine Arts

Dishman, Fowler, Reichrath

A major for the Bachelor of Arts degree consists of 51 semester hours in art and must include Art 100, Art 110, Art 121, Art 131, Art 132, Art 211, Art 230, Art 232, Art 300, Art 301-302, Art 310, Art 321, Art 401, Art 421, Art 432, and Art 440.

A major for the Bachelor of Science in Education degree with one teaching field consists of 47 semester hours in art. The major must include Art 100, Art 110, Art 121, Art 131, Art 132, Art 211, Art 220, Art 230, Art 232, Art 300, Art 301-302, Art 310, Art 321, Art 401, Art 421, Art 432, and Art 440. A student wishing to certify to teach art as one of two teaching fields must complete 36 hours.

### 100 — Art Composition

3 hrs. cr.

Introductory course using fundamental techniques and media, including art practice and theory.

#### 110 — Introduction to Art

3 hrs. cr.

A general survey course designed to increase appreciation of visual art.

#### 121 — Ceramics

3 hrs. cr.

Methods and techniques of hand building are studied with application to modeling and throwing clay forms. Prerequisite: Art 100 or 110.

131 — Drawing Techniques

3 hrs. cr.

Free-hand drawing problems using various drawing tools and techniques used by master artists. Prerequisite: Art 100.

132 — Introduction to Design

3 hrs. cr.

Foundation course using problems involving art principles and elements.

200 - Arts and Crafts

3 hrs. cr.

General crafts course involving leather tooling, block printing, pottery, weaving and some graphics. May be taken by non-art majors.

211 — Sculpture Techniques

3 hrs. cr.

Study of various sculptural problems and techniques in stone, clay, wood, and mixed media. Prerequisite: Art 100, 121.

220 — Art Education

3 hrs. cr.

Course designed to develop understanding of the problems in teaching art with emphasis on methods of teaching various art problems. Required of all Elementary Education Majors.

230 — Basic Form

3 hrs. cr.

Study of relationships of parts to form. Problems include two and three dimensional. Prerequisite: Art 100 or 110.

232 — Painting

3 hrs. cr.

Procedures, techniques, and fundamentals of painting, media — oil, watercolor, and mixed. Prerequisite: Art 100 and 131.

300 — Drawing

3 hrs. cr.

Self exploration of various drawing elements including artistic anatomy, composition, structure, and aesthetics. Prerequisite: Art 100, 131, or approval of the instructor.

301-302 — Art History

(per sem.) 3 hrs. cr.

(301) Survey of the development of man's artistic endeavors from Stone Age to the Early Renaissance; (302) Continuation of 301 from the Early Renaissance in Italy to the present art styles.

310 — Watercolor

3 hrs. cr

Technical and aesthetic understanding of watercolor with various subject matters encouraged. Prerequisite: Art 131.

321-322 — Sculpture

3 hrs. cr.

(321) Various media (stone, marble, wood) are chosen by the student for investigation; (322) Continuation of Sculpture 321. Prerequisite: Art 211.

#### **COURSES OF INSTRUCTION**

401 — Painting 3 hrs. cr.

The student selects an individual problem for investigation. Techniques, history, and appreciation of oil painting surveyed for understanding. Prerequisite: Art 232.

#### 412 — Commercial Art

3 hrs. cr.

Lettering, layout, and design techniques. Survey of various reproductive processes. Prerequisite: Art 131, 230, and 232.

421 — Head Study

3 hrs. cr.

Fundamental methods in portraiture. Various drawings and painting media for structure of the head. Artistic head anatomy used for each head study. Prerequisite: Art 131 and 232 or 300.

432 — Graphics

3 hrs. cr.

Initial laboratory exercises in various graphic processes — etching, engraving, block print, and lithography. Prerequisite: Art 300.

440 — Independent Study

2 hrs. cr.

Special study in any area as determined in consultation with major adviser. Prequisite: Senior standing.



### **AUTOMOTIVE TECHNOLOGY**

#### **Division of Semi-Professional and Technical Education**

Mason, Adams

The major emphasis in Automotive Technology is specialization in automotive service. The training received also provides the background for entry into research and experimental fields. General education courses provide for growth as an individual and for constructive living in the family and nation.

The curriculum is college oriented. Students are regular members of the campus body and are expected and encouraged to participate in extracurricular activities.

The Associate of Science degree in Automotive Technology requires the completion of the General Education courses (see page 47) plus the following: Auto 100, Auto 110, Auto 120, Auto 130, Auto 190, Auto 200, Auto 220, Auto 250, Auto 260, and Draf 110. Electives should be selected, with adviser approval, from the fields of business law or economics. This is a two-year program.

### 100 — Automotive Engine

5 hrs. cr.

A beginning course in theory and practical mechanics of the Internal Combustion Engine. Emphasis is placed on the physics and chemistry of combustion as related to engineering principles. Students work in the laboratory shops with engines to learn mechanical relationships and usage of tools and gauging instruments. Three one-hour lectures; 12 hours laboratory per week.

### 110 — Technical Mathematics

3 hrs. cr.

Review of basic mathematics, algebra, and the functional concepts of trigonometry. Includes use of tables and graphic methods of solving problems with emphasis on application to problems in applied fields. Daily.

# 120 — Automotive Electrical, Ignition and Carburetion Systems

5 hrs. cr.

A beginning course in electricity, basic automotive ignition systems, fuels and lubricants, production and testing. Emphasis is on electrical fundamentals as related to spark ignition and carburetion principles. Laboratory periods provide opportunity to learn mechanical relationships of parts in carburetors, starters, generators, regulators and relays, and distributors. Three one-hour lectures; 12 hours laboratory per week.

#### **COURSES OF INSTRUCTION**

### 130 — Business and Shop Records

3 hrs. cr.

A basic accounting cycle with emphasis on recording transactions affecting cash, sales, purchases, and the preparation of financial statements. Three one-hour lectures.

#### 190 — Technical Science

4 hrs. cr.

Graphical and mathematical analysis of forces, laws of motion machines, mechanical power, fluid mechanics, and fastening devices as related to basic machine design. Course work places emphasis on applied problems. Three one-hour lectures; one two-hour laboratory. Prerequisite: Auto 110 or Math 140 and Math 100 with minimum grades of C.

## 200 — Automotive Chassis, Brakes and Transmissions

5 hrs. cr.

Principles of hydraulics, pneumatics, and dynamic forces as related to the modern automobile. Shop work emphasizes balance, steering, control, suspension design, and power train component operation. Students learn mechanical relationships in transmissions, clutches, and differentials; also, front and rear suspensions and brake systems. Three one-hour lectures; 12 hours laboratory per week.

# 220 — Automotive Refrigeration and Air Conditioning

3 hrs. cr.

The course familiarizes the student with automotive air-conditioning installation and thermodynamic principles. Students service units on and off the vehicle and study problems related to heat transfer and cooling. Two one-hour lectures; 6 hours laboratory per week.

### 250 — Automotive Body and Paint

5 hrs. cr.

Theory and practice in metallurgy as related to metal fabricating, moulding, shaping, and welding. Students work in shop laboratory repairing basic automotive body parts. Emphasis is on repair theory as well as making repairs and refinishing damaged body parts. Three one-hour lectures; 12 hours laboratory per week.

### 260 — Automotive Servicing

5 hrs. cr.

Simulated automotive dealership garage with actual working conditions on customers' cars. Emphasis is placed on public relations, auto shop layout, and management of personnel. 15 hours. Prerequisite: Auto 100, 120, 200, and 220 with minimum grades of C.

### **BIOLOGY**

#### **Division of Natural Sciences and Mathematics**

Beasley, Bingman, Gibson, Gier, McConnell, Orr

The Bachelor of Science degree with a major in biology requires 37 hours in biology. Required courses include Bio 110, Bio 120, Bio 202, Bio 211, Bio 303, and Bio 480.

Upper division students may follow interests but must take at least one course from each of the following areas. A (structure), B (function), C (identification).

Group A — Bio 331, Bio 411, Bio 421, Bio 462

Group B — Bio 321, Bio 402, Bio 431

Group C — Bio 322, Bio 341, Bio 442

Additional requirements include 13 hours of chemistry through organic and Math 140.

The Bachelor of Science in Education degree with biology as a single teaching field (Plan B) requires 30 hours in biology plus 18 hours in supporting subjects of chemistry and mathematics. Required courses include Bio 110, Bio 120, Bio 211 and 12 upper division hours in biology. In addition, 13 hours of chemistry through organic and Math 140.

The Bachelor of Science in Education degree with biology as one of two teaching fields (Plan A) must complete 22 semester hours in biology, 12 of which must be upper division, plus 13 hours in supporting subjects of science and mathematics. Required courses are Bio 110, Bio 120, and Chem 100, three hours in mathematics, and either Phys 151 or Geol 110.

100 — General Biology

5 hrs. cr.

A one semester general treatment of the unifying principles of living things including metabolism, genetics, evolution and ecology. Four lectures and one 2 hour lab per week. (Does not count toward any biology major.)

110 — General Botany

5 hrs. cr.

Fundamental principles of metabolism, growth and reproduction as expressed in the plant kingdom. A survey of the major groups of plants is included as an integral part of the study. Three lectures and two 2 hour labs per week.

120 — General Zoology

5 hrs. cr.

The morphology, physiology and classification of animals with emphasis on the anatomy and physiology of man. Three lectures and two 2 hour labs per week.

#### **COURSES OF INSTRUCTION**

202 — Genetics 3 hours cr.

A comprehensive introduction to the principles of heredity and variations as exemplified by both the higher plants and animals. Emphasis will be placed on the cytological and molecular approach to gene action, linkage, crossing-over and various other genetic mechanisms such as sex-linkage and mutations. Three lectures a week. Prerequisite: Bio 100, 110, or 120.

211 — Microbiology

5 hrs. cr.

Principles of general microbiology with special emphasis on the anatomy, nutrition, physiology and chemistry of bacteria, fungi, and other microscopic organisms. Three lectures and two 2 hour labs per week. Prerequisites: Bio 100 or 110 and one year of inorganic chemistry, or permission of the instructor.

221 — Human Anatomy and Physiology

5 hrs. cr.

The structures and functions of the human body with emphasis on arrangement of organs and coordination of body systems. Three lectures and two 2 hour labs per week. Prerequisite: Bio 120 w/a grade of C or permission of the instructor.

231 — Fundamentals of Medical Microbiology

5 hrs. cr.

For students interested in paramedical professions. Topics of study include the general principles of microbiology, immunology, host-parasite relationships of pathological organisms. Three lectures and two 2 hour labs per week. Prerequisite: 1 course each of a college chemistry and a biological science. Credit toward the biology major may include either Bio 211 or Bio 231 but not both.

302 — History of Biology

2 hrs. cr.

A historical survey into the origin and development of the fundamental concepts of biology as well as contemporary developments in the field of biological research. Two lectures a week. Prerequisite: Junior standing or consent of the instructor.

303 — Principles of Taxonomy

1 hr. cr.

A course designed to aid the biology student in the principles of zoological and botanical taxonomy, understanding the species concept and cognizance of taxonomic literature. Prerequisites: Bio 110 and 120 or permission of the instructor. One lecture per week. Fall semester.

310 — Field Biology

2 hrs. cr.

The course engenders appreciation and understanding of the local flora and fauna, and provides information pertinent to preparation and preservation of specimens for laboratory use. Consists of one lecture and one two-hour laboratory each week. At least

one Saturday field trip will be required. Prerequisite: Bio 100 or permission of instructor. (Does not count toward any biology major.)

321 — Plant Physiology

5 hrs. cr.

The life processes of plants including metabolism, translocation, growth, development, reproduction and response to stimuli. Emphasizes the chemistry of the plant's physiological activities. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 110, and one year of inorganic chemistry. (Organic chemistry is recommended).

322 — Taxonomy of Flowering Plants

4 hrs. cr.

The relationships among selected plant groups, classification and descriptions of taxa, nomenclature and concepts concerning the evolutionary sequence of various plant characters. Southwestern Missouri flora will be emphasized. Two lectures and two, 2 hour lab/week. Prerequisites: Bio 110 and 303.

331 — Comparative Chordate Anatomy

5 hrs. cr.

Designed for the serious student of biology or those students planning to enter professional schools of medicine, dentistry or veterinary science. Acquaints the student with the evolutionary trends of chordate structure and development with special emphasis on the vertebrate organs and organ systems. Two lectures and two three-hour labs/week. Prerequisite: Bio 120.

332 — Introduction to Entomology

3 hrs. cr.

A study of the insects with respect to collecting methods, taxonomy, life history, morphology and evolution. Prerequisites: Bio 120 and 303. Two lectures and one three-hour lab/week.

341 — Vertebrate Zoology

5 hrs. cr.

Classification, morphology, physiology, development and evolution of vertebrate animals. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 120.

342 — Microtechnique

2 hrs. cr.

A study of the principles of preserving, fixing, staining, and mounting of biological materials. Prerequisites: Bio 110 and 120. Two 2-hour labs/week.

402 — General Ecology

4 hrs. cr.

A study of plant and animal communities in relation to their environment, emphasizing the flora and fauna of Southwest Missouri. Soils, climate and other major environmental factors responsible for the distribution and association of plants and animals are also considered. Two lectures and one, 3 hour lab/week. Prerequisite: Bio 110, 120, and 322, or consent of the instructor.

#### **COURSES OF INSTRUCTION**

### 411 — Plant Anatomy

5 hrs. cr.

A comprehensive study of tissues and cellular structure in the higher plants, including a comparative study of the structure of roots, stems and leaves of the vascular plants. Emphasis is given to evolution and development of the various tissues. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 110.

### 421 — Plant Morphology

5 hrs. cr.

A comprehensive study of the comparative structures, life histories and evolutionary tendencies concerning the vegetative and reproductive organs of the major groups of plants. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 110.

### 431 — Animal Physiology

5 hrs. cr.

A comprehensive coverage of the chemical and physical phenomena occurring within living animals, with major emphasis placed on man. Three lectures and two, 2 hour labs/week. Prerequisite: Ten hours of biology and chemistry through organic required. It is strongly recommended that the student also have 5 hours of physics and Bio 331.

### 432 — Histology

3 hrs. cr.

A detailed study of microscopic structure of animal tissues and organs with special emphasis on mammalian tissue. Prerequisite: Ten hours of zoology or consent of the instructor. Two lectures and one 3-hour lab/week.

### 442 — Invertebrate Zoology

5 hrs. cr.

Classification, morphology, physiology, development and evolution of the classes of invertebrate animals. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 120.

### 462 — Embryology

5 hrs. cr.

Includes detailed comparisons of developmental processes of members of the classes of vertebrates. Three lectures and two, 2-hour labs/week. Prerequisite: Bio 120 and/or Bio 331.

### 470 — Problems in Biology

1-3 hrs. cr.

Consists of individual work under the supervision of a staff member, with the credit and hours to be arranged. Problems may be undertaken in any field of biology, with adequate preparation and the consent of the supervising instructor. Prerequisite: A minimum of 20 hours in biology and consent of the supervising instructor.

#### 480 — Seminar

1 hr. cr.

A faculty supervised discussion group concerned with reviews and reports covering current topics in the various fields of biology. Faculty members, as well as students, will present reviews in their various areas of interest. One meeting/week. Prerequisites: Primarily for biology majors of junior standing or other interested students with at least 15 hours of biological science.

#### **CHEMISTRY**

#### **Division of Natural Sciences and Mathematics**

Altendorf, Baiamonte, Gosch, Kash

A major for the Bachelor of Science degree consists of 34 semester hours in chemistry plus 20 additional hours in mathematics and physics. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, Chem 401, 5 elective upper division hours in chemistry, Math 150, Math 250, Phys 250, and Phys 260.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 50 semester hours. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, Chem 401, Math 150, Math 250, Phys 250, and 6 elective hours in 200 level and above courses in mathematics, physics, and/or chemistry.

A major for the Bachelor of Science in Education degree with chemistry as one of two teaching fields (Plan A) consists of 28 semester hours plus 5 hours of mathematics. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, 2 elective upper division hours in chemistry, and Math 140.

#### 100 — Introductory Chemistry

5 hrs. cr.

The basic principles and theories of general chemistry. Primarily designed as a terminal course in chemistry. Three lectures, one 3-period laboratory, and one recitation session per week.

## 101 — General Chemistry I

5 hrs. cr.

Introduction to theories of chemistry with emphasis on the relationship of structure to properties of matter and the quantitative aspect of changes. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite or corequisite: Math 140 or higher level math course.

## 102 — General Chemistry II

3 hrs. cr.

A continuation of Chem 101. Emphasis on the dynamics and thermodynamics of chemical processes and on the properties and reactions of analogous groups of cations and anions. Three lectures and one recitation session per week. Prerequisites: Chem 101 with a minimum grade of C or permission of instructor and Math 140 or higher level math course.

## 162 — Qualitative Analysis

3 hrs. cr.

Identification of cation and anions. Application of principles presented in Chem 102. One lecture and two 3-period laboratories per week. Prerequisite or Corequisite: Chem 102.

#### 201 — Quantitative Analysis

5 hrs. cr.

Includes volumetric, gravimetric, and some potentiometric and spectrophotometric analysis. Three lectures and two 3-period laboratories per week. Prerequisite: Chem 102.

## 301 — Organic Chemistry I

5 hrs. cr.

Deals with both aliphatic and aromatic compounds, their nomenclature, properties, reactions and stereochemistry. Three lectures, one three-period laboratory, and one recitation section per week. Prerequisite: Chem 102.

## 302 — Organic Chemistry II

5 hrs. cr.

A continuation of Chem 301. A mechanistic treatment of substitution, elimination, addition, and free radical reactions. Three lectures, one three-period laboratory, and one recitation session per week. Prerequisite: Chem 301.

#### 401 — Physical Chemistry I

3 hrs. cr.

Gases, solids, liquids, homogeneous and heterogeneous solutions and thermodynamics. Theoretical derivations of equations and mathematical treatments of physical and chemical phenomena. Three lectures per week. Prerequisites: Math 260 and Phys 260.

#### 402 — Physical Chemistry II

3 hrs. cr.

A continuation of Chem 401. The study of chemical kinetics, electromotive force, photochemistry, colloid chemistry, and atomic and molecular structure. Three lectures per week. Prerequisite: Chem 401.

## 403 — Experimental Physical Chemistry

2 hrs. cr.

Laboratory course to accompany Chem 402. Experimental applications of principles presented in Chem 401 and Chem 402. Two 3-period laboratories per week. Prerequisite: Chem 401. Corequisite: Chem 402.

## 421 — Instrumental Analysis

5 hrs. cr.

Special analytical techniques using spectrophotometry, gaschomatography, colorimetry, and electrometric methods to include potentiometric, conductometric, polargraphic, and electrogravimetric analysis. Three lectures and two 3-period laboratories per week. Prerequisite: Chem 201.

# 422 — Advanced Inorganic Chemistry

3 hrs. cr.

Modern inorganic chemistry with emphasis upon coordination complexes, periodic classification of the non-transitional and transitional elements. Three lectures per week. Prerequisites: Chem 102 and Math 250.

## 472 — Organic Qualitative Analysis

3 hrs. cr.

Systematic identification of organic compounds and mixtures. One lecture and two 3-period laboratories per week. Prerequisite: Chem 302.

#### 490 — Independent Study

1-3 hrs. cr.

Independent investigational techniques; includes a paper upon a selected topic with both a critical survey of the chemical literature and results from advanced laboratory experimentation. Open to students having (1) a minimum of 15 hours of chemistry, (2) the ability to undertake independent work, and (3) permission of the instructor.

#### **COMPUTER SCIENCE**

#### **Division of Semi-Professional and Technical Education**

Carpenter, Fore

The rapid increase in the use of electronic equipment in business and industry has created the need for the Computer Science programs. Students successfully completing one of these programs will find many opportunities for employment in banking, industry, and various governmental agencies. There are three available programs:

The Associate of Science degree in Computer Programming requires the completion of the General Education courses (see page 54) plus the following: Acct 101 and 102, Acct 211, Comp 100, Comp 110, Comp 120, Comp 130, Comp 140, Comp 150, Comp 200, Econ 201 and 202, MM 350, Math 30 or Math 130.

This is a two-year program.

The Associate of Science degree in Electronic Data Processing Coordination prepares the graduate for immediate employment in tabulating departments in banks, industries, or governmental agencies. The student will become capable of simple program design and operation of tab equipment and will possess an extensive background in general secretarial work. The degree requires the completion of the General Education courses (see page 54) plus the following: Acct 101 and 102, Comp 100, Comp 110, Comp 120, Comp 130, GB 101, MM 350, Math 30 or Math 130, and OA 201. Electives should be selected, with approval of adviser, from the business areas of statistics, economics, shorthand, secretarial procedures, business law or office machines. This is a two-year program.

The Associate of Science degree in Computing Analysis prepares the graduate for entry into fields of science and engineering

as a computer programmer. In this field the programmer confers with engineers, scientists and other officials concerned, to determine if data meets the needs of the problems and, if necessary, develop mathematical formulas and procedures to provide more efficient machine operation. The degree requires the completion of the General Education courses (see page 54) plus the following: Comp 120, Comp 130, Comp 140, Comp 150, Comp 220, Math 150, Math 250, Math 260, Math 322, Math 431, Math 361, or GB 321, Phys 250, and Phys 260. This is a two-year program.

#### 100 — Basic Computing Machines

3 hrs. cr.

Illustrates the need for machines in accounting and record keeping, and demonstrates the concept, power, and flexibility of the unit record. Includes the unit records, machine functions, elements of a machine, card punch, verifier, interpreter, sorter, reproducing punch, collator, tabulators, and calculators and introduction to number systems. Basic problem analysis and logical block diagramming.

#### 110 - E.A.M. and Key-Punch Operation

3 hrs. cr.

Preliminary emphasis on basic mastery of the keyboard and mechanism of the key-punch. Latter portion of the course places emphasis on speed and accuracy of operation of both key-punch and E.A.M. equipment. Daily.

## 120 — Introduction to Programming

3 hrs. cr.

An introduction to digital computers which includes: Basic principles, systems theory, decimal systems, arithmetic operations, self-complementing codes and other coding systems, computer logic, systems components, general block diagram and program functions, high speed memory, programming essentials, and solution of simple data processing problems. Two one-hour lectures; one two-hour laboratory per week. Prerequisites: Comp 100 and Math 130 or consent of instructor.

## 130 — Advanced Programming

3 hrs. cr.

The functions and capabilities of electronic data-processing machines, introducing student to some of the tools and raw material necessary for becoming a programmer. Includes computer applications, organization of the data processing system, instruction—card system, methods of program debugging, housekeeping techniques, loops and indexing, and subroutines. Two one-hour lectures; one two-hour laboratory per week. Prerequisite: Comp 120.

# 140 — Data Processing Applications

3 hrs. cr.

A continuation of 130. The principles presented in previous courses will be employed repeatedly in this course. Includes subroutine, macro-programming, job timing, programming a random access device, and program testing. Latter portion of course involves individual projects in data processing from analysis through implementation. Two one-hour lectures; one three-hour laboratory per week. Prerequisite: Comp 130, or consent of instructor.

## 150 — Computer Machine and Machine Language

3 hrs. cr.

Provides the necessary foundation for study of business data processing. Usually includes the concepts of notation, binary system, octal system, systems conversions, representation of a number with an arbitrary base, fixed and floating point numbers, precisions and significances, and linear equations. Prerequisite: Comp 100 or consent of instructor. Three one-hour lectures.

## 200 — Systems Development and Design

3 hrs. cr.

Business systems design and development designed to guide the student through the evolution of a system, analysis of present information flow, system specifications and equipment selections, and implementation of the system. Includes the approach, requirements of a system, developing the solution, data controls, system controls, system evaluation, finalizing the system, and system implementation. Three one-hour lectures plus necessary arranged laboratory time. Prerequisite: Comp 140.

210 — Statics (See Physics 272)

3 hrs. cr.

## 220 — Analog Computers

3 hrs. cr.

Methods and techniques of solving simultaneous linear and non-linear differential equations on electronic analog computers. Includes the principles of multiplication and division and simulation of non-linear devices and systems. Two one-hour lectures; one two-hour laboratory per week.

## 250 — Introduction to Numerical Analysis

4 hrs. cr.

Digital computer programming, finite differences, numerical solution of non-linear systems, and differential equations. Problem solving on a digital computer. Must be preceded or taken simultaneously with Math 322. Three one-hour lectures; one two-hour laboratory per week.

#### DRAFTING AND DESIGN

#### **Division of Semi-Professional and Technical Education**

#### Anderson

The Drafting and Design curriculum is planned to provide students with the knowledge and skills necessary to enable them to obtain employment as draftsmen in the engineering and design departments of industry, with governmental agencies, consulting engineering firms, and architectural firms.

The Associate of Science degree in Drafting and Design requires the completion of the General Education courses (see page 54) plus the following: Art 100, Draf 110, Draf 120, Draf 130, Draf 200, Draf 210, Draf 220, and Draf 230. Electives should be selected with the assistance of the student's adviser from the areas of physical science, business, and psychology.

#### 110 — Introductory Drafting

3 hrs. cr.

A comprehensive introduction to drafting that includes training in the use of drawing instruments, applied geometry, lettering, technical sketching, tracing and blueprinting. One hour lecture and four hours laboratory per week.

## 120 — Descriptive Geometry

3 hrs. cr.

Practical applications of principles to problems of geology and mining, mechanical and architectural engineering. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

## 130 — Machine Drafting

3 hrs. cr.

Detail and assembly drawing of machines, threaded fasteners, and gears. Use of machine tools, processes and materials. One hour lecture and four hours laboratory per week. Prerequisites: Draf 110, or equivalent, and Math 30 or Math 130.

## 200 — Machine Design

3 hrs. cr.

An introduction to machine design. Advanced drafting techniques and procedures. Elements of machine design, redesigning and original problems. One hour lecture and four hours laboratory per week. Prerequisites: Draf 130, or equivalent, and Draf 120.

## 210 — Production Illustration

3 hrs. cr.

Pictorial drawing with emphasis on application to industrial production work. Methods of mechanical illustration, exploded views, design, layout techniques. One hour lecture and four hours laboratory per week. Prerequisites: Draf 120 and 130.

## 220 — Architectural Drafting

3 hrs. cr.

The fundamental principles of house planning, including materials of construction and room arrangements. Plans will be drawn of some suitable building. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

#### 230 - Electrical and Pipe Drafting

3 hrs. cr.

The use and application of electronic components and equipment. Techniques of representing these principles graphically. Problems dealing with design and layout of piping systems. Specifications of parts of piping systems, valves, fittings, and other components. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110 and 120.

#### **ECONOMICS**

#### **Division of Business and Economics**

Deman, Gray, Larimore, Miller, Stengel, Tiede

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree and a Bachelor of Science in Business Education degree.

The requirements for the Semi-Professional and Technical Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 143.

## 201 — Principles of Economics

3 hrs. cr.

A study of fundamental institutions of the American Economy, the theory of price determination, and the theory of income distribution. Prerequisite: Sophomore standing or permission.

## 202 — Principles of Economics

3 hrs. cr.

A study of aggregate economic performance with emphasis on national income stabilization and growth, business cycles, monetary and fiscal policy, international trade, comparative economic systems, and current economic problems. Non business majors taking Economics to meet the General Education requirements should take Econ 202. Business majors should take Econ 201 and 202 in sequence.

## 300 - Money and Banking

3 hrs. cr.

The constituents, nature, functions, creation, and destruction of money and credit; the monetary institutions and their functions, with special emphasis on the commercial banking system and the Federal Reserve System; introduction to monetary theory and policy. Prerequisite: Econ 201 and 202.

#### 302 — Economic Growth and Development

3 hrs. cr.

Principles and problems involved in promoting development of the less mature economies, and growth in the more mature economies. Prerequisite: Econ 201 and 202.

#### 350 — Corporate Finance

3 hrs. cr.

An examination of the financial structure of business organization, capital structure and methods of raising fixed and working capital; questions of financial policy, such as dividend policies and the conservation of surplus; comparative balance sheets and income-expense statements. Prerequisite: Econ 201 and 202, Acct 102.

#### 401 — Microeconomic Analysis

3 hrs. cr.

An analytical study of the price systems, as affecting resource allocation and other welfare questions. Prerequisite: Econ 201 and 202.

## 402 — Macroeconomic Analysis

3 hrs. cr.

Study of the determination of the levels of real and monetary aggregate economic variables. Analysis of economic aspects of government regulation and direction of business enterprise. Prerequisite: Econ 201 and 202.

#### 411 — Investments

3 hrs. cr.

Principles underlying investment analysis and policy; salient characteristics of governmental and corporate securities; policies of companies and investing institutions; relations of investment policy to money markets and business fluctuations; security price-making forces. Prerequisite: Econ 350.

#### **EDUCATION**

#### **Division of Education and Psychology**

Niess, Dryer, Easterday, Highland, Mason, Schuster, Snyder

#### **Teacher Education Program**

Realizing the important contributions made to our society by its educational system, Missouri Southern College has made the preparation of teachers one of the basic objectives of the institution. The College faculty supports the objective by recognizing the preparation of teachers as the responsibility of the entire College. It is fulfilled through the Council on Teacher Education which coordinates the teacher education phase of the various instructional divisions. The Department of Education has the overall responsibility for the actual administration of the Teacher Education Program.

The Teacher Education Program is based on the following basic beliefs and assumptions:

- 1. A teacher should be provided a broad background in general education.
- 2. A teacher should be required to demonstrate an acceptable degree of mastery in his specialized teaching field.
- 3. A teacher should possess the personal qualities that can be identified as essential for effective teaching.
- 4. A teacher should demonstrate an understanding of the contribution education can make toward the continuation and improvement of our society.
- 5. A teacher should possess the professional attitudes and competences necessary to serve the education profession effectively.

As a reflection of these beliefs and assumptions, the College seeks to achieve these objectives through the Teacher Education Program:

- 1. To provide the graduates of high schools in the College service area with information on teaching as a profession.
- 2. To identify and attract to the program of teacher education students who possess the intellectual, personal and physical qualities necessary to become effective teachers.
- 3. To provide a program of studies and experiences that will develop graduates capable of effectively performing the duties as teachers in the elementary or secondary school.
- 4. To provide prospective teachers with a program that emphasizes the importance of the basic theories of learning in teaching.

- 5. To cooperate with local, state, regional, and national agencies that have as their purpose the improvement of education.
- To aid school administrators, boards of education, and other educational organizations with problems relating to education programs.

#### **Bachelor of Science in Education Degree**

Students who are planning a career in teaching at either elementary and/or secondary schools work toward the degree Bachelor of Science in Education. The satisfactory completion of the requirements for this degree qualifies a person for life certification in Missouri. Recipients of other degrees, who later decide to teach, can certify by meeting the requirements outlined by the State Department of Education.

Students deciding to work toward the degree Bachelor of Science in Education must elect to major in elementary education or in one of the subject matter areas available to those seeking a secondary certificate.

Elementary Education — If preparation for teaching at the elementary school level is desired, the student may emphasize either primary or intermediate grades. Elementary majors are required, also, to select an area of concentration of 21 semester hours from art, business education, science (biological and physical), mathematics, social science, language arts (English and speech), music, or health and physical education. Applicable general education course requirements may also count toward the selected area of concentration.

A student specializing in elementary education must complete these additional or specific general education courses:

- 1. One additional course in mathematics
- 2. Geography must be selected from the Social and Behavioral Science (Area 2)
- 3. One additional course in U. S. History
- 4. A course in economics is strongly recommended

Candidates for the degree Bachelor of Science in education with a major in elementary education must satisfactorily complete 30 semester hours, including the following required courses: Bio 310, Eng 222, Music 262, Art 220, Eng 200 or Eng 301, Psy 302, HPER 311, Educ 311, Educ 312, Educ 340, Educ 370; select one of the following: Educ 492 or Educ 420 or Educ 351 or Speech 493.

Secondary Education — The student who desires to teach in a secondary school may choose to become qualified in a single teaching field with a high degree of specialization, or in two different teaching fields with a lesser degree of specialization in each. Available for secondary school teaching are:

- 1. Art
- 2. Biology
- 3. Chemistry
- 4. Business Education
- 5. English
- 6. Spanish

- 7. Mathematics
- 8. Music
- 9. Physical Education
- 10. Physics
- 11. Social Science
- 12. Speech and Drama

A student may elect a supporting area or a minor from any one of the twelve listed majors.

Under certain circumstances, it is possible for a person to become qualified to teach art, music, or physical education at both the elementary and secondary school level. Students interested in such a program should consult the department involved.

A student emphasizing secondary education must also complete departmental course requirements under either Plan A or Plan B.

#### Plan A: (Double Major)

This plan is intended for those persons who desire to qualify as teachers in two different subject matter areas. Each area requires 30 semester hours of specific course work or the minimum State Department of Education requirement. Plan A is not available in social science, music, or in programs preparing teachers for both elementary and secondary certification. If Plan A is selected, the second teaching field is required.

## Plan B: (Single Teaching Field)

This plan is intended for the person who wishes to concentrate his teacher preparation in one subject matter area only. Thirty-six or more semester hours are required in the subject matter area or related supporting courses listed in this catalog by the department.

A person choosing a single teaching field may also earn a minor of 21 semester hours of specific course work in some other or related field, which will qualify him for a second teaching field at the junior high school level only.

Each department that prepares students for secondary school teaching has developed a program of studies to be pursued by students who choose to follow either of the above plans. Plan

B is mandatory for majors in social science, music, and in certain programs preparing students for dual certification at both the elementary and secondary school level.

#### Advisement

Each student who enrolls at Missouri Southern will have an adviser assigned who will help the student plan his program of studies. All freshmen are advised by the Student Personnel Services. A student above the freshmen level will have faculty advisers assigned by the division in which he chooses to specialize. The Department of Education advises only majors in elementary education and physical education.

Information regarding teacher certification requirements, employment opportunities, professional education requirements, and supervised student teaching may be obtained from the Department of Education.

## **Admission to the Teacher Education Program**

Admission to Missouri Southern College does not automatically confer admission to the Teacher Education Program.

Students who plan to enter the professional education sequence and become certified teachers are required to apply for admission to the Teacher Education Program. This application is made at the time the student is enrolled in Educational Psychology or during the last semester of the sophomore year. The application form may also be obtained from the Education Office. Each application is reviewed individually by the Teacher Selection Committee.

In determining a student's fitness for the teaching profession, the committee considers test results, scholarship, English proficiency, experience with children and youth, autobiography, physical and mental health, and other appropriate faculty recommendations. The minimum scholarship essential to acceptance is a grade point average of 2.1 on 55 or more semester hours.

The Committee decisions on student applications fall into three categories: (1) Approved for admission to the teacher education program; (2) Approved on the condition that certain stated requirements be met; or (3) Advised not to continue in teacher education. The student must have acceptance into the program before he is admitted to the professional education sequence of courses.

## **Supervised Teaching**

A second point of selection in the Teacher Education program occurs when the student is ready to do supervised teaching during the "Professional Semester" of the senior year. To qualify for supervised teaching, the student must have attained a minimum

2.2 accumulative grade point average and at least a "C" grade in Educational Psychology. Exceptions to this requirement will not be allowed unless approved by the Teacher Selection Committee.

#### **Professional Education**

The following sequence of courses is to be completed by students planning to teach at the secondary or elementary level:

#### Freshmen-Sophomore Year

Three to five hours of developmental psychology selected from Psy 110, Psychology of Human Development; Psy 200, Child Psychology or Psy 210, Adolescent Psychology. Elementary education majors should choose between Psy 110 or Psy 200. (Psy 310, Educational Psychology may also be taken the last semester of the sophomore year.)

#### **Junior Year**

Psy 310	Educational Psychology	3 hours
Educ 320	Structure of Teaching, Elementary	5 hours
or Educ 330	Structure of Teaching, Secondary	5 hours

#### Senior Year

The "Professional Semester" occupies one complete semester. For one-half of the professional semester, the student carries three, three-hour courses and during the other one-half does supervised teaching (approximately nine weeks). Courses outside of this block may not be scheduled. Required courses are:

## **Secondary Teaching**

Educ 462	Student Teaching, Secondary	6	hours
	Critical Issues in Education	3	hours
Educ 402	History and Philosophy of Education	3	hours
Select one	of the following:		
Psy 412	Measurement and Evaluation	3	hours
or			
Psy 451	Psychology of Learning	3	hours
	11		

## **Elementary Teaching**

Educ 442	Student Teaching, Elementary	6 hours
Educ 432	Critical Issues in Education	3 hours
Educ 402	History and Philosophy of Education	3 hours

Select one of the following:

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Psy 412	Measurement and Evaluation	3 hours
or		
Psy 451	Psychology of Learning	3 hours
or		
Educ 412	Social Foundation of	
	Curriculum Development	3 hours

## **Combination of Elementary and Secondary Teaching**

For students majoring in art, music, foreign language or physical education who desire certification at both the elementary and secondary levels, the following professional semester is recommended:

Educ 444	Student Teaching, Elementary	3	hours
Educ 464	Student Teaching, Secondary	3	hours
Educ 432	Critical Issues in Education	3	hours
Educ 402	History and Philisophy of Education	3	hours
Select one	of the following:		
Psy 412	Measurement and Evaluation	3	hours
Psy 451	Psychology of Learning	3	hours
Educ 412	Social Foundations of		
	Curriculum Development	3	hours

#### **Home Base College**

The Missouri State Department of Education strongly recommends that all college graduates who did not take teacher education in their degree programs and who wish to certify as teachers in the State of Missouri, designate a home base college. The designated college is responsible for certifying to the State Department of Education that a person has fulfilled the necessary requirements for certification. Missouri Southern College may be designated a home base college on the condition that the person has been admitted into its Teacher Education Program.

## 010 — Techniques of Reading

2 hrs. cr.

A reading improvement program consisting of group and individual work, intended primarily for students needing remedial work in reading. Individual diagnostic reading tests determine student needs. (Cannot be applied to any degree.)

# **302** — The Exceptional Child (See Psychology 302)

2 hrs. cr.

(See Fayeriology 302)

# 311 — Science in the Elementary School

2 hrs. cr.

Emphasis on science in the child's environment. Development of problems, activities, and experiments. Survey and evaluation of

teaching materials and laboratory equipment suitable to the elementary school. Prerequisite: Courses in biological and physical science.

# 312 — Problems of Teaching Arithmetic in Elementary Schools (See Math 312)

2 hrs. cr.

Basic course in the teaching of arithmetic in the elementary grades. The application of principles of learning and techniques of presentation are considered. Prerequisite: 3 hours math.

## 320 — Structure of Teaching — Elementary

5 hrs. cr.

An integrated course including problems related to the teaching of elementary social studies and general instruction in the elementary school. Classroom organization and management, lesson, curriculum, and unit planning are studied. Introduces students to professional laboratory experience through television and actual classroom participation in an elementary school. Prerequisites: Psy 200 or 110, and Psy 310 (or may be taken concurrently).

#### 330 — Structure of Teaching — Secondary

5 hrs. cr.

A study of techniques of teaching in the secondary school with consideration of the social and psychological nature of the learner. Emphasis on classroom management and control methods of presentation, construction of units and lesson plans. Development and status of secondary education in the United States. Introduces students to professional laboratory experiences through television and classroom participation. Special methods of teaching the various academic areas will be included in this course as a part of a team teaching arrangement. Prerequisites: Psy 200, or 210, or 110 and Psy 310 (or may be taken concurrently).

#### 340 — Language Arts and Reading in the Elementary School

5 hrs. cr.

Foundation course for development of understanding attitudes necessary to teach written and oral communication, listening, and reading at the elementary level.

## 351 — Teaching the Mentally Retarded

3 hrs. cr

Designed to help the prospective or in-service teacher understand mental retardation. Attention is given to courses, diagnosis, and teaching methods especially suited to mentally retarded children.

#### 370 — Introduction to Instructional Media

2 hrs. cr.

Designed to give the teacher a basic understanding of the preparation and use of the various audio-visual materials and devices, with emphasis on the preparation of such materials. Recommended for elementary and secondary education majors.

#### 402 — History and Philosophy of Education

3 hrs. cr.

Study of educational thinking and practices from the ancient to the present. Emphasis is on relating earlier educational thought to the schools of today.

## 412 — Social Foundations of Curriculum Development 3 hrs. cr.

An overview of curriculum and instruction as it relates to the elementary and secondary schools; considers the psychological, sociological, and philosophical basis for curriculum building. Emphasis is on social foundations.

#### 420 — Principles of Guidance

3 hrs. cr.

Survey of guidance philosophies, principles and practices. Designed for the classroom teacher as well as the guidance specialist, and is a basic course in the guidance sequence.

#### 422 — Teaching Reading in Secondary Schools

2 hrs. cr.

Designed to help prospective teachers understand reading development and its part in the total school program. Required for certification of secondary teachers of English in Missouri.

#### 432 — Critical Issues in Education

3 hrs. cr.

Current problems in the area of education are explored, with special regard to legal and professional role of school personnel, their relationship to federal and state governments, and to local school districts; certification, salary schedules, retirement and other benefits, professional organizations for teachers, relationship with administration, pupils, parents, and the community.

## 442 — Student Teaching — Elementary

6 hrs. cr.

Participation, under supervision, in teaching on the elementary level in an off-campus school. Prerequisites: 88 semester hours with a grade point average of 2.2, admission to the program of teacher education, and Educ 320. Course assignments will include full-time supervised teaching for one-half of the semester. Additional general conferences are scheduled as needed. Specific assignment is made by the Department of Education.

## 443 — Student Teaching — Elementary

6 hrs. cr.

Participation, under supervision, on the elementary level in an off-campus school. Curriculum participation and observation consists of daily three-hour period of time during regular semester. Prerequisite: See Educ 442.

## 444 — Student Teaching — Elementary

3 hrs. cr.

Designed to provide student teaching experience in an approved public school at both elementary and secondary levels. Prerequisite: See Educ 442. Course assignment to consist of a minimum of 15 hours a week of student teaching for one-half semester. Conferences will be scheduled as needed. Specific assignment is made by Department of Education.

## 462 — Student Teaching — Secondary

6 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials and methods integrated with student teaching. Prerequisite: Educ 330 or equivalent, fifteen semester hours in teaching field, and a minimum of 88 semester hours with a grade point average of 2.2. Assignment to consist of full-time teaching for one-half semester with professional courses to be taken during other half of semester. Specific assignment is made by Department of Education.

## 463 — Student Teaching — Secondary

6 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with student teaching. Prerequisites: See Educ 462. Assignment to consist of daily three-hour block of time during a regular semester.

## 464 — Student Teaching — Secondary

3 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with teaching participation and observation. Prerequisites: See Educ 462. Assignments consist of a minimum fifteen hours per week of participation and conferences for one-half the semester. Specific assignments are made by Department of Education.

# 492 — Techniques of Diagnostic and Remedial Instruction in Reading

2 hrs. cr.

A study of devices and techniques for diagnosis of reading disabilities and presentation of suggested remedial measures and methods of reducing deficiencies. Practical applications and laboratory experience will be emphasized. Special emphasis upon intermediate and secondary school reading problems. Prerequisite: Educ 340 or 422.

#### **ENGLISH**

#### **Division of Humanities and Fine Arts**

Headlee, Blades, Blevins, Bowman, Bryant, Ellis, Gardner, G. Hunt, J. D. Johnson, McCormick, Mitchell, Murray, Preble, Short, Todd, Wolfe

A major for the Bachelor of Arts degree consists of 42 semester hours and must include Eng 200, Eng 210, 220, Eng 301, Eng 311, 312, 322, Eng 331, 332, Eng 361 or Eng 371, Eng 381 or Eng 481, Eng 411 or 421, Eng 431 or Eng 452, Eng 440, and one of the following electives: Eng 232, Eng 322, Eng 342.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 42 semester hours of English above freshman composition, Journalism 312, and 10 semester hours in one foreign language. Required English courses are Eng 200, Eng 210, 220, Eng 301, Eng 311, 312, Eng 331, 332, Eng 361 or 371, Eng 381 or Eng 481, Eng 411 or Eng 421, Eng 431 or Eng 452, Eng 440, and one of the following electives: Eng 232, Eng 322, Eng 342.

A major for the Bachelor of Science in Education degree as one of two teaching fields (Plan A) consists of 30 semester hours of English, Journalism 312, and 10 hours in one foreign language. Required English courses are Eng 200, Eng 210, 220, Eng 301, Eng 311, 312, Eng 331 or Eng 332, and Eng 440; one of the following: Eng 342, Eng 361, Eng 371, Eng 381, Eng 481; one of the following: Eng 431, Eng 452, Eng 411, or Eng 421.

## 90 — Composition

3 hrs. cr.

A course designed for students whose placement scores indicate a need for additional work. Three hours of class work and two hours of laboratory per week. No credit toward an associate degree or a baccalaureate degree. Course grade is recorded pass or fail.

# 101-102 — Composition

(per sem.) 3 hrs. cr.

(101) A study of the principles of effective writing based largely upon expository prose models. Students demonstrating exceptional ability may be permitted to substitute English 111; (102) Develops reading comprehension through a study of various types of literature and offers practice in expository writing. Must be taken in sequence.

## 111 — Composition

3 hrs. cr.

A special composition and literature course for freshmen demonstrating exceptional proficiency on placement tests. With a grade of C or better in English 111, a student automatically receives three hours credit for English 101, thereby satisfying the six-hour composition requirement. He enriches his 124-hour graduation program

by enrolling for a course in another area in lieu of a second freshman composition course. Should he receive a D in English 111, however, he must take English 102.

120, 130 — Masterpieces of World Literature (per sem.) 3 hrs. cr.

(120) Selected masterpieces of world literature through the Renaissance, except British literature; (130) From the Renaissance to the present except British literature.

200 — Exposition

3 hrs. cr.

A study of the techniques of factual writing and the writing of nonfiction. Recommended for all students, especially those entering professional schools. Prerequisite: Six hours composition.

210, 220 — English Literature

(per sem.) 3 hrs. cr.

(210) Survey of English Literature to the Romantic Movement; (220) From the Romantic Movement to the present. Prerequisite: Eng 102 or 111.

222 — Children's Literature

3 hrs. cr.

A reading, lecture, and observation course for elementary education students, including evaluation of children's literature, its historical development, and its uses in elementary school.

232 — American Negro Literature

3 hrs. cr.

All representative literary genres illustrating the growth of American Negro literature.

English Literature 210, 220, or equivalent courses, are prerequisites for all upper class English courses, except 301, 311, 312, 322, 342.

301 — Structure of American English

3 hrs. cr.

A study of current English structure and usage. Introduction to transformational grammatical studies. Required for prospective teachers.

311, 312 — American Literature

(per sem.) 3 hrs. cr.

(311) A survey of American literature to the Civil War; (312) Survey of American literature beginning with the Civil War.

322 — Twentieth Century Drama

3 hrs. cr.

English and American drama from Shaw to the present.

331, 332 — Shakespeare

(per sem.) 3 hrs. cr.

(331) A study of selected histories and early comedies; (332) A study of selected tragedies and late comedies.

#### 342 — American Novel

3 hrs. cr.

A study of representative American novels.

#### 361 — The Romantic Period

3 hrs. cr.

Representative authors and literary tendencies. Offered 1969-70.

#### 371 — The Victorian Period

3 hrs. cr.

Representative authors and literary tendencies. Excludes the novel. Offered 1970-71.

#### 381 — The English Novel

3 hrs. cr.

Representative English novels from 1700 to the present.

#### 411 — Literature of the English Renaissance

3 hrs. cr.

Poetry and prose of the English Renaissance between 1550 and 1640 with the exception of Shakespearean works. Consideration of the nature and spread of the Continental Renaissance with related readings in that literature.

#### 421 — Eighteenth Century English Literature

3 hrs. cr.

The enlightenment and the decline of neoclassicism in non-dramatic literature from 1700 to 1785, Pope to Johnson. Offered 1970-71.

## 431 — Medieval English Literature

3 hrs. cr.

Literature of England from the Anglo-Saxon and Middle English period. Emphasis upon Chaucer. Offered 1970-71.

## 440 — Explorations in Literature

3 hrs. cr.

Special studies in literature for seniors majoring in English.

## 452 — Seventeenth Century English Literature

3 hrs. cr.

Study of the art and thought in nondramatic English literature from 1603 to 1700. Offered 1969-70.

# 481 — Twentieth Century Poetry

3 hrs. cr.

English and American Poetry from Yeats to the present.

## **FOREIGN LANGUAGES**

#### **Division of Humanities and Fine Arts**

Colon, Hollingsworth, Schairer

The Department of Foreign Languages offers a full curriculum of courses in Spanish, with supporting courses in French and German. A language laboratory is used in all elementary courses.

A major for the Bachelor of Science in Education degree with Spanish as the single teaching field (Plan B) consists of 40 semester hours. The required courses are Span 101-102, Span 201, Span 202, Span 301, Span 302, Span 321, 322, Span 332, Span 421, Span 431, and Span 434.

A major for the Bachelor of Science in Education degree with Spanish as one of two teaching fields (Plan A) consists of 31 semester hours. The required courses are Span 101-102, Span 201, Span 202, Span 301, Span 302, and one course out of Span 321, 322, or 332.

Students entering with no high school units in foreign language should take 101. Usually those with one high school unit should take 101 for 3 hours credit. Students with two high school units should take 102 (5 hrs. cr.). Students with three high school units may take 102 for 3 hours credit or 201. Placement tests will also be used to ascertain the correct class placement of students.

#### **French**

# 101-102 — Elementary French (per sem.) 5 hrs. cr.

(101) Stresses conversation, pronunciation, essentials of grammar and diction. (102) Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required in both semesters.

## 201 — Readings in French Literature 3 hrs. cr.

Intermediate reading. Discussion of literature in French. Emphasis on vocabulary building. Grammar review. Prerequisite: Fren 102 or equivalent.

# 202 — Advanced Readings in French Literature 3 hrs. cr.

Representative works read and discussed in French. Short stories, a novel and poetry. Prerequisite: Fren 201 or equivalent.

# 301 — French Composition 3 hrs. cr.

Translation from English to French and from French to English. Intensive study of grammar and idioms. Prerequisite: Fren 202 or equivalent.

## 302 - Advanced French Composition

3 hrs. cr.

Practice in writing French compositions. Thorough study of grammar, syntax, and idiomatic expressions. Prerequisite: Fren 301.

#### 321, 322 — Survey of French Literature

(per sem.) 3 hrs. cr.

(321) Study of French literature from its origins to the seventeenth century. Prerequisite: Fren 302 or equivalent. (322) French literature of the seventeenth, eighteenth, and nineteenth centuries. Prerequisite: Fren 321.

#### German

#### 101-102 — Elementary German

(per sem.) 5 hrs. cr.

(101) Stresses conversation, pronunciation, essentials of grammar and diction. (102) Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required each semester.

## 201 — Readings in German Literature

3 hrs. cr.

Intermediate reading. Discussion of literature in German. Emphasis on vocabulary building. Grammar review. Prerequisite: Ger 102 or equivalent.

## 202 — German Composition

3 hrs. cr.

Translations from English to German and from German to English. Intensive study of grammar, syntax, and idiomatic usage. Prerequisite: Ger 201 or equivalent.

## Spanish

## 101-102 — Elementary Spanish

(per sem.) 5 hrs. cr.

(101) Conversation and reading and writing. Pronunciation proficiency and grammar essentials. Conducted in Spanish as far as practicable. Language laboratory required. (102) Continuation of 101.

## 201 — Readings in Spanish Literature

3 hrs. cr.

Intermediate reading in Spanish classics. Representative works are read and discussed in Spanish. Short story, novel, and poetry. Prerequisite: Span 102 or equivalent.

## 202 — Advanced Readings in Spanish Literature

3 hrs. cr.

Representative works are read and discussed in Spanish with emphasis on political, social, and geographical significance. Novel, short story, and poetry. Prerequisite: Span 201.

**SPANISH** 

## 301 — Spanish Composition

3 hrs. cr.

Practice in writing Spanish accompanied by a thorough study of grammar and syntax. Prerequisite: Span 202.

## 302 — Advanced Spanish Composition

3 hrs. cr.

Practice in writing Spanish accompanied by thorough study of grammar and syntax with emphasis on subtle elements of idiomatic usage. Prerequisite: Span 301.

#### 321, 322 — Survey of Spanish Literature

(per sem.) 3 hrs. cr.

(321) The literary background and important writers from the origin of Spanish literature to 1700. Representative works are read and discussed critically, with written and oral reports. (322) 1700 to the present. Prerequisite: Span 202.

## 332 — Introduction to Spanish-American Literature 3 hrs. cr.

Representative works of poetry, short story, and essay are read and discussed. Prerequisite: Span 301, 302.

## 421 — Nineteenth Century Spanish Novel

3 hrs. cr.

The Spanish novel as an art form, exemplified by selected works by such writers as Alarcon, Valera, Pereda, Galdos, Pardo-Bazan, Palacio Valdes, and Blasco Ibanez. Prerequisite: Span 322.

## 431 — Don Quijote

3 hrs. cr.

The source, structure, characters, language, and style of Cervantes' masterpiece. Prerequisite: Span 321.

## 434 — The Spanish American Novel

3 hrs. cr.

Origin and development of the Spanish American Novel, its political, social, geographical and literary influence. Prerequisite: 20 hours of Spanish.

#### **GENERAL BUSINESS**

#### **Division of Business and Economics**

Cowan, Compton, Deman, DeNeen, Goode, Stengel

The student may consider three approaches to the Bachelor of Science in Business Administration degree. Required courses common to all three approaches are: Acct 101, 102, Econ 201, 202, Econ 300, Econ 350, GB 101, GB 220, GB 301, 302, GB 321, MM 300, MM 350, and MM 352. The Accounting approach requires an additional 18 hours out of the following courses: Acct 211, Acct 212, Acct 301, Acct 302, Acct 401, Acct 402, and Acct 411. The General Business approach requires the following 12 hours of additional courses: 3 hours credit selected from each area — Economics, Marketing and Management, and General Business, and 3 additional hours from either Business or Economics. The Marketing and Management approach requires an additional 18 hours of business and economics, 12 hours of which are selected from the following: MM 312, MM 401, MM 431, MM 412, MM 452.

A major for the Bachelor of Science in Education degree with Business Education as one of two teaching fields (Plan A) consists of 30 semester hours. The required courses are: OA 101, 102, OA 111, 120, Acct 101, 102, and either Acct 211 or 212 or 401, Econ 201, 202, and 3 hours of upper division electives in Business. Other course work may be substituted for shorthand if the student does not plan to certify in it. Students having proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses in order to meet the 30 hours requirement.

A major in the Bachelor of Science in Education degree with Business Education as a single teaching field (Plan B) consists of 42 semester hours. The required courses are: Acct 101, 102, and either Acct 211 or 212 or 401, Econ 201, 202, GB 121, GB 301, 302, MM 350, OA 101, 102, OA 111, 120, and 3 upper division elective hours in Business. Course substitution and advanced placement is the same as under Plan A in the paragraph above.

The requirements for the Semi-Professional and Technical Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 143.

#### 101 — Introduction to Business

3 hrs. cr.

An introductory course in modern American business, including a study of the capitalistic system, ownership and organization, management problems, marketing, finance, law and taxation.

#### 110 — Business Mathematics

3 hrs. cr.

A review of the fundamental processes of mathematics as applied to business. It also includes common and decimal fractions, percentages, markup, interest, bank discount, compound interest, annuities, insurance, payrolls, taxes, and financial statements. It should be taken concurrently with or precede accounting and/or office machines.

#### 121 — Office Machines

3 hrs. cr.

A laboratory course in the operation of the office machines found in the modern business office. Training is given in the operation of the ten-key and full-key adding machines, the electronic calculator, the rotary calculator, the printing calculator, the key-driven calculator, the bookkeeping machine, the transcriber, and the spirit and stencil duplicators. Emphasis is placed upon the student developing accuracy and speed in working typical business problems. Meets five days a week. Prerequisite: 1 semester of high school or college typewriting.

#### 122 — Office Machines

3 hrs. cr.

An advance laboratory course, continuing the work as set up in office machines 121. Special emphasis is placed on machine book-keeping and the electronic, rotary and printing calculators. The student is also expected to attain additional skill in the operation of adding machines. A special unit of the course includes operation of programmatic electronic equipment. Meets three days a week. Prerequisite: GB 121.

#### 220 — Business Communications

3 hrs. cr.

The study of principles for writing effective business letters, memos, formal and informal reports and all phases of effective business communications. Prerequisites: Eng 101 and 102 or permission.

#### 301, 302 — Business Law

3 hrs. cr.

(301) A study of the principles of law and its enforcement as applied to American Business. The course includes the study of contracts, agency and employment, negotiable instruments, personal property, and bailments, and sales of goods. Special attention is placed on law terminology and cases and problems are used to illustrate the various aspects of business law; (302) Relates to partnerships, corporations, real property and leases, insurance security devices, bankruptcy, trusts and estates, and government regulations. Cases and problems are used extensively. Prerequisites: Junior standing or consent of the instructor. 301 should precede 302.

321 — Statistics 3 hrs. cr.

Introduction to the basic concepts of statistical inference and to the methods of statistical analysis. Prerequisite: Math 110 or equivalent.

490 — Directed Studies in Business and Economics 1-3 hrs. cr.

By arrangement. Directed readings, research, and discussions in selected areas of business and economics for advanced majors. Scope, depth, area of concentration, and credit to be arranged upon entry into the course. Prerequisite: Senior standing and permission.

#### **GEOGRAPHY**

## **Division of Social Science** Gockel

#### 211 — Regions and Nations

3 hrs. cr.

A survey of the peoples of the earth and how their activities are influenced by climate, topography and natural resources.

#### 212 — Latin American Geography

3 hrs. cr.

Stress will be placed upon natural economic and cultural aspects of individual countries, their growing importance in world affairs and their relation to Pan-Americanism.

## **GEOLOGY**

## GEOL 110 — Introduction to Geology.

5 hrs. cr.

The materials of the earth and those forces producing psysiographic changes. Four lectures and one, two-hour laboratory or field trip a week.



## HEALTH, PHYSICAL EDUCATION AND RECREATION

## **Division of Education and Psychology**

Bogard, Davis, J. Johnson, Light, Landrith, Twenter, Yount

Students who desire certification as a teacher of health, physical education, and recreation may choose to become qualified at either the secondary level or a combination of both elementary and secondary levels. Students planning to major in this field should refer to pages 79-84 of this catalog where the Teacher Education Program is described. Students planning to teach at both the elementary and secondary level should select Plan B. Those desiring to make physical education one of two teaching fields should prepare under Plan A. The second teaching field must be selected from: Art, biology, business education, chemistry, English, mathematics, physics, Spanish, or speech. The student will consult the specific department concerned for the requirements of the second teaching field.

An area of concentration in driver education is also offered in this department.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 46 semester hours. For men, the required courses are: Psy 200 or Psy 110, Bio 221, HPER 151, 152, \*HPER 260, HPER 312, HPER 342, HPER 350, HPER 410, HPER 421M, HPER 431, HPER 470, HPER 450, HPER 451, and HPER 452 or HPER 462.

For women, the required courses are Bio 221, Psy 200, HPER 151, 152, \*HPER 260, HPER 212, HPER 312, HPER 342, HPER 352, HPER 410, HPER 421-422W, HPER 431 and HPER 470.

A major for the Bachelor of Science in Education degree with physical education as one of two teaching fields (Plan A) consists of 32 semester hours. For men the required courses are: Bio221, HPER 151, 152, HPER 342, HPER 350, HPER 421M, HPER 431 or 470. Select 6 hours from HPER 352, HPER 450, HPER 451, HPER 452, HPER 462.

For women, the course requirements are: Bio 221, HPER 151, 152, HPER 212, HPER 342, HPER 352, or HPER 421-422W, 431 and 470.

\*All physical education majors must demonstrate swimming ability equal to that required for the intermediate swimming course.

#### **Driver Education**

To meet the Missouri teacher certification requirements as a driver education instructor the following courses are required: Psy 210, Psy 221, HPER 212, Educ 370, HPER 361, HPER 362, Educ 420 or a course in auto mechanics. Driver education may be selected as a minor area of concentration for any persons planning to teach at the scondary level under Plan B. Persons under Plan A could also obtain certification for driver education, but this certification would need to be in addition to their other two teaching fields.

Persons planning to major in Physical Education should go to the physical education office to secure a sheet detailing the course requirements for the curriculum.

See the information on the Physical Education Activity philosophy, and courses immediately following the course numbers and legends, beginning with page 104.

#### 100 — Individual Physical Education

2 hrs. cr.

For the physically disabled student. Opportunity is provided for the development of physical skills within the limits of the disability. (Meets 5 times per week.)

## 151, 152 — Foundations of Physical Education I (per sem.) 4 hrs. cr.

Acquaints the student with the philosophical and theoretical background of physical education. Study of the skills and understandings of selected activities: games, sports and rhythm commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness. Taught by a team composed of members of both the men's and women's physical education departments. Meets for two periods daily. (Either HPER 151 or 152 may be replaced with 5 semester hours of different activity courses, with permission of department head.)

#### 160 — Personal Health

2 hrs. cr.

Study of some health problems of the individual, body mechanics, nutrition, quackery, science disease, sex hygiene, mental hygiene, and the cause and prevention of common diseases. Not recommended for elementary education or physical education majors.

## 212 - First Aid and Safety

3 hrs. cr.

Designed to complete the standard course of the American Red Cross in First Aid and to acquaint the student with materials for safety education in the home, school and community.

## 260 — Advanced Swimming and Senior Life Saving 2 hrs. cr.

Techniques of individual safety in water, methods of aiding a person in distress, rescue of a drowned person and resuscitation. Coed. Prerequisite: HPER 132, or average swimming ability.

## 311 — Physical Education for the Elementary School 2 hrs. cr.

Study of the methods and materials needed in directing the activity program of games, skills, rhythm, and stunts for the elementary school child. Designed for men and women who are candidates for the elementary teaching certificates.

## 312 — Elementary School Psysical Education 3 hrs. cr.

Analysis of basic movement patterns, basic skills, and rhythmic and game activities with detailed explanations of the methods for presenting these to the elementary school child. (P.E. majors only.)

#### 330 — Methods of Teaching Secondary School Physical Education

Lectures, demonstrations, small group work, individual conferences, opportunity for participation in teaching physical education activities in the secondary school. (See Educ 330)

# 340 — Organization of Adapted Physical Education 3 hrs. cr.

Study of the means used to provide a physical education program to fit the needs of the physically handicapped.

# 342 — Mechanical and Kinesiological 3 hrs. cr. Approach to Movement

A mechanical and kinesiological approach to the movement of average and exceptional individuals in various activities. Prerequisite: Bio 211 or equivalent.

## 350 — Care and Prevention of Injuries 3 hrs. cr.

Laboratory experiences in the care of athletic injuries. Open to men only. Prerequisite: Bio 221 and HPER 342. May be taken concurrently with HPER 342.

# 352 — Rhythmic Form and Analysis 2 hrs. cr.

Analysis of dance forms showing how complex music and dance forms are evolved. Prerequisite: Activity course in dance.

## 361 — Introduction to Driver Education 3 hrs. cr.

The first of two courses designed to prepare teachers of driver education for secondary schools. The place of the motor vehicle in American life; traffic safety; instructional materials and recommended methods of presenting such materials in the classroom and in the

car on the road; laboratory work with beginning drivers. Prerequisites: Students must have: (1) a valid driver's license and (2) a safe driving record.

#### 362 — Advanced Driver and Traffic Safety

3 hrs. cr.

A continuation of 361 with special attention given to administration, organization, finance, adult education, research, and evaluation of the school driver education program. Traffic safety problems at the local, state and national levels are also considered. Prerequisite: HPER 361.

## 370 — School and Community Health Education 3 hrs. cr.

Study of the services, facilities, and equipment needed for school and community as they relate to the health of the individual and of the groups. Should be taken by all elementary education and Physical Education majors in place of HPER 160.

#### 390 — Introduction to Recreation

3 hrs. cr.

A study of the recreation movement in America with a special insight into the development of community recreation departments and programs.

#### 391 — Recreational Leadership

3 hrs. cr.

A study of the qualities which make for effective leadership and a look at the role of the recreation leader. Prerequisite: HPER 390.

## 410 — History and Philosophy of Physical Education 3 hrs. cr.

A study of the changing role of physical education as indicated by its historical past and as evidenced through the influence of the various philosophers and philosophies.

# 411 — Teaching and Supervision of Sports and Games I

3 hrs. cr.

A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of team sports. Men only.

# 421, 422 — Teaching and Supervision of Sports and Games I & II

(per sem) 3 hrs. cr.

A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of team sports. Women only.

# 431 — Administration of the Co-Curricular Programs in 3 hrs. cr. Physical Education

Study of the organization and management of the extra-class physical education program in schools; staff functions, student leadership, officiating, facilities, equipment, health and legal aspects. Emphasis on interscholastic, intramurals, play days, and sports days.

## 450 — Theory of Basketball

2 hrs. cr.

Organization and management of the secondary school basketball program. Systems of offense and defense in basketball. Study of rules, training schedule, discussion of problems arising during training and regular playing season.

## 451 — Theory of Football

2 hrs. cr.

Attention to team play, systems of offense and defense, field strategy, discussion of rules, training and equipment.

## 452 — Theory of Track and Spring Sports

2 hrs. cr.

Organization of administration and meets, coaching, physical conditioning and training for each event including track and field programs. Golf, tennis, and other spring inter-scholastic sports are also included.

## 462 — Theory of Baseball

2 hrs. cr.

Organization and management of a school baseball program to individual techniques, team play and problems in coaching of baseball.

# 470 — Organization and Administration of Health, Physical Education and Recreation

Organization and management of health and physical education in schools; scheduling, personnel, curriculum, finance, equipment, and facilities. Prerequisite: 10 hours P.E.

# 480 — Independent Study

1-3 hrs. cr.

Research of a problem or field study relating to physical education; material, content, credit and schedule to be arranged by the department head.

#### THE ACTIVITY PROGRAM IN PHYSICAL EDUCATION

The objective of the activity program in physical education is not necessarily physical fitness. Rather this program has the purpose of offering a program that will provide the student with the opportunity to develop a degree of skill sufficient to create interest and participation in this activity as leisure time during the adult years.

To insure exposure to the various recreational activities, the College requires freshman students to enroll for a physical education activity course or health education during each semester of their resident attendance until they have earned four semester hours of credit in this area. Physical education majors should enroll in HPER 151 and 152 during their freshman year. Both elementary education majors and physical education majors should take HPER 370 in their junior year in place of HPER 160 during their freshman year.

All freshman women and men should enroll in HPER 101 (physical education majors 151) during the first semester and HPER 102 (physical education majors 152) during the second semester. Students are required to complete two additional activity courses of their choice or to complete HPER 160.

Varsity athletes should also enroll in the sport of their choice which will replace any activity course requirement except HPER 101 and 102.

A uniform prescribed by the division is to be furnished by each student and is a course requirement.



#### PHYSICAL EDUCATION

#### **ACTIVITY COURSES**

Co	urse No	).	Hr	s. Cr.
	101M	Introduction to Physical Activities I		1
	101W	Introduction to Physical Activities I		1
	102M	Introduction to Physical Activities II		1
	102W	Introduction to Physical Activities II		1
	100C	Individual Physical Education		1-2
	120C	Bowling and Golf		1
	110	Tennis and Badminton		1
	131	Elementary Swimming		1
	132	Intermediate Swimming		1
	141M	Touch Football, Speedball, Softball, Basketball		1
	142	Track, Volleyball		1
	150C	Social Dance		1
	161M	Varsity Football		1
	162M	Varsity Basketball		1
	171M	Varsity Cross Country		1
	172M	Varsity Track and Field		1
	180M	Varsity Golf		1
	182M	Varsity Baseball		1
	192M	Varsity Tennis		1
	231C	Elementary Gymnastics and Tumbling		1
	232C	Intermediate Gymnastics		1
	240	Fencing and Archery		1
	242	Wrestling, Weight Training, Boxing		1
	252	Recreational Activities		1
	262	Intermediate Ballroom Dance		1
	272	Intermediate Folk Dance		1
	281	Elementary Modern Dance		1
	282	Intermediate Modern Dance		1

Unless otherwise noted, courses listed above have separate sections for women and men. The letters M, W, and C will be added to the course number of the schedule to indicate the designated sections. M indicates the course is for men only. W indicates the course is for women only. C indicates the course is coed.

#### HISTORY

#### **Division of Social Science**

Cooper, Gockel, Holman, Hughes, Markman, Schafer

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government or community service will want to take the Bachelor of Arts degree. A history major for this degree consists of 30 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, 6 upper division semester hours in United States History, 6 upper division semester hours in European History and 6 upper division hours in history electives.

History may also be used as a minor or supporting area with certain majors. The requirements are 21 semester hours: Hist 110, Hist 120, Hist 200, Hist 201 or 202, 9 upper division semester hours in history.

A social science major for the Bachelor of Science in Education degree, with an emphasis in history, consists of 49 semester hours. (Plan B must be followed with this major; see Education, page 81.) The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, 6 upper division semester hours in United States History, 6 upper division hours in European History and 6 upper division semester hours in history electives. For the remaining 19 hours the candidate will choose Econ 202 and at least one course from each of the social science areas (i.e., political science, geography and sociology) beyond the general education courses. The student is encouraged to select courses in the other areas of social science in as much depth as possible within the 19 hours.

## 110 — United States History 1492-1877

3 hrs. cr.

A survey study of the United States from the "Age of Discovery and Exploration" through reconstruction. Each semester.

# 120 — United States History 1877 to the Present

3 hrs. cr.

A continuation of course 110. This course is a survey study of the economic, social and political development of the United States from 1877 to the present. Each semester.

#### 200 — Western Civilization to 1500

3 hrs. cr

A survey of the development and progress of western civilization from prehistoric times through 1500. The course surveys the contributions of the early peoples to civilization as well as feudalism, the Church, the crusades, and the Renaissance. Attention is also given to oriental civilizations. Each semester.

## 201 — Europe 1500 to 1815

3 hrs. cr.

A survey study of Europe from the Renaissance and the Reformation to Waterloo. Emphasis is placed on the origin and development of the modern states system after 1500 as well as the social and cultural developments of the era. Each semester.

#### 202 — Europe 1815 to the Present

3 hrs. cr.

A survey study of Europe in the 19th and 20th centuries. Emphasis is placed on political, social and economic developments accelerating the growth of liberalism, nationalism and imperialism. Each semester.

#### 301 — United States Social and Intellectual History 3 hrs. cr.

A study of thoughts and ideas that have influenced the intellectual, cultural and social aspects of United States History from colonial times to 1877. Prerequisite: Hist 110. Fall semester.

## 302 — United States Social and Intellectual History 3 hrs. cr.

A continuation of History 301. A study of the social and cultural aspects of the United States during the period of its great industrial expansion and emergence as a major world power. Prerequisite: Hist 110 or 120. Spring semester.

## 321 — Ancient History

3 hrs. cr.

A study of ancient times from the prehistoric period to the end of the Roman Empire. Special consideration is given to the Ancient Empires and their contributions to literature, art, religion, and science against a political economic and social background. Prerequisite: Hist 200, 201, 202. Fall semester.

## 322 — Medieval History

3 hrs. cr.

A study of Europe from the end of the Roman Empire to 1500. Emphasis is placed on the significant historical aspects of the medieval period such as feudalism, the Church, the Crusades and the Renaissance. Prerequisite: Hist 200, 201 or 202. Spring semester.

## 331 — Economic History of the United States

3 hrs. cr.

A study of the development of the American economy and its related institutions from colonial times to the present. Prerequisite: Hist 110.

#### 341 — The American Frontier

3 hrs. cr.

The westward expansion of the United States and its effects upon the social, political and economic institutions until the close of the frontier in 1890. Prerequisite: Hist 110 or 120. Fall 1970-71.

#### 352 — Europe Since 1919

3 hrs. cr.

The aftermath of World Wars I and II in Europe. Emphasis is placed on the formation of the League, collective security, a study of the totalitarian systems, the United Nations and current problems of world peace. Prerequisite: Hist 200. Spring semester 1970-71.

#### 361 — The English Colonies in America

3 hrs. cr.

A study of the progress and development of the English Colonies from 1492 to 1776. Emphasis is placed on the extension of English social, political and economic institutions as a background for the American Revolution. Prerequisite: Hist 110. Fall 1969-70.

#### 371 — English History to 1660

3 hrs. cr.

A survey of the rise and development of the English people from the Roman conquest to the Stuart Restoration. Emphasis is placed upon English Constitutional development and related institutions. Prerequisite: Hist 200. Fall semester.

#### 372 — English History from 1660

3 hrs. cr.

A continuation of History 371. This is a survey of English History from the Restoration to the present. Attention is placed on the development of the cabinet system and the emergence of modern political democracy. Prerequisite: Hist 200. Spring semester.

## 381 — Diplomatic History of the United States to 1900 3 hrs cr.

A study of the diplomatic relations of the United States and the related development of its foreign policy from 1789 to 1900. Prerequisite: Hist 110 or 120. Fall 1969-70.

## 382 — Twentieth Century Diplomacy

3 hrs. cr.

A historical investigation of the activity of the United States and the world of our time. The course emphasizes the increasing importance of the United States in World Affairs since it became a world power. Prerequisite: Hist 110 or 120. Spring 1969-70.

## 401, 402 — Independent Study

1-3 hrs. cr.

Independent study in particular areas of history. Prerequisite: Hist 110, 120, 200, 201 or 202. Each semester.

## 411 — European Intellectual History

3 hrs. cr.

A study of the intellectual, cultural and social occurrences in Europe from the Italian Renaissance to the French Revolution. Emphasis is placed on the Age of Enlightment. Prerequisite: Hist 200, 201, and 202. Each fall semester.

# 412 — European Intellectual History

3 hrs. cr.

A continuation of History 411. Attention is given to the significant effects of the French Revolution, Nationalism, Socialism and mass warfare upon European civilization in the 19th and 20th centuries. Prerequisite: Hist 200, 201 or 202. Each spring semester.

### 431 — The Renaissance and the Reformation 1300-1650 3 hrs. cr.

A study of the political, economic, religious and social development of Europe from the Crusades through the Reformation. The course reviews early European society and institutions and traces the replacements of these by the modern state system and capitalism and the reformation of the Church. Prerequisite: Hist 200, 201 or 202. Spring 1970-71.

#### 451 — The United States 1870-1920

3 hrs. cr.

A study of the United States at the turn of the century. The impact of the industrial revolution and its effect on social, political and economic institutions, the Progressive Movement and World War I. Prerequisite: Hist 110 or 120. Fall 1969-70.

#### 452 — The United States Since 1920

3 hrs. cr.

A detailed study of the impact of the great industrial development of the United States upon its history during the five decades since 1920, the roaring twenties, the turbulent thirties as well as the fitful fifties and sixties. Prerequisite: Hist 110, 120. Spring 1969-70.

# 461 — English Constitutional History

3 hrs. cr.

The development of English political and legal institutions with emphasis on the Anglo-Norman background, the rise of parliament, Tudor absolutism, the Stuart period of revolution, development of the Cabinet, nineteenth century democratization, and evaluations resulting from the crises of the twentieth century.

# 462 — United States Constitutional History

3 hrs. cr

A study of the growth and development of the United States Constitution from 1787 to the present. Prerequisite: Hist 110 or 120. Spring 1969-70.

# 481 — History of China

3 hrs. cr.

A survey of modern China. Special emphasis is placed on Chinese society, political developments and relations with the west in the 19th and 20th centuries. Prerequisite: Hist 200, 201 or 202. Fall 1970-71.

### 482 — History of Japan

3 hrs. cr.

A survey of modern Japan. The course traces Japan's history from the middle of the 19th century to the present. Special attention is given to the development of Japan and the world reaction to it as it came into contact with western culture. Prerequisite: Hist 200, 201 or 202. Spring 1970-71.

### 491 — The Era of the French Revolution and Napoleon 3 hrs. cr.

A study of Europe during the period of revolution and reaction 1789-1815. Emphasis is placed on the French Revolution, the rise and fall of Napoleon and their manifestations for the future. Prerequisite: Hist 200, 201 or 202. Fall semester 1970-71.



# **JOURNALISM**

# **Division of Humanities and Fine Arts**

Murray

The journalism program provides training for the student desiring to work in the communications media, for the education major who will advise newspaper and yearbook staffs, and for the student who plans to transfer to a school of journalism. While pursuing a bachelor's degree at Missouri Southern, a student may accumulate 25 hours in journalism. The education major can qualify for state certification. The student headed for a journalism school can test his interest in a career in this field by enrolling in a course or two and by working on the college newspaper, **The Chart.** 

To receive the Bachelor of Arts degree with a major in English and a minor in journalism, the student must complete the English major requirements and 21 hours in the supportive area of journalism, as approved by the Division Chairman.

To receive the Bachelor of Science in Education degree with a major in English and certification in journalism, the student must complete the requirements for a major in English and accumulate 15 hours in the supportive area of journalism, as approved by the Division Chairman.

Students expecting admission to a school of journalism their junior year should follow the schedule recommended for the freshman and sophomore years of candidates for a Bachelor of Science in Education degree with a major in English. They must have 13 hours in one foreign language and principles of economics.

# 111 — News Writing

3 hrs. cr.

A study of news of some complexity; editing, copy reading, and proofreading. Practical work on the college newspaper, **The Chart.** Prerequisite: Consent of instructor.

#### 121 — Mass Communications

2 hrs. cr.

A study of the history and development of the mass communications industry and its role in the political, social, and economic life of the present. Brief study of the professional requirements and vocational opportunities in the field of journalism.

# 220 — Practical Journalism

3 hrs. cr.

Application of journalistic principles to the college newspaper. One hour of credit each term for a maximum of three terms. Prerequisite: Jour 111 or consent of instructor.

### 231 — Feature Writing

3 hrs. cr.

Advanced course in writing special articles for newspapers and magazines. Practical work on college publications. Prerequisite: Jour 112 or consent of instructor.

### 232 — Editorial Writing

3 hrs. cr.

An analysis of editorials appearing in responsible publications and the writing of editorials of some maturity.

### 241 — Radio and Television News Writing

3 hrs. cr.

Techniques of preparing radio and television newscasts, including reporting, writing, editing, and illustrating newscasts. Prerequisite: Jour 111, Speech 201.

### 302 — Photo-Journalism

3 hrs. cr.

Theory and practice of photo-journalism. Study of technical and communications aspects of photography and their application to news media. Prerequisite: Jour 111.

### 312 — Publication Principles

2 hrs. cr.

Editorial and production practices of trade journals and publications of church, school, and business. Special emphasis on high school newspapers and yearbooks.

### 320 — Advertising

3 hrs. cr.

(See Business, Mktg 302)

#### LAW ENFORCEMENT

# Division of Semi-Professional and Technical Education

The Associate of Science degree in Law Enforcement prepares students for entrance into police work, a field which has become highly specialized and complex at the local, state and national levels. Modern law enforcement responsibilities make academic preparation beyond the high school level essential.

Many law enforcement agencies have specific requirements regarding minimum age, height, weight, vision, and other related requisites. Students interested in this field should check with appropriate agencies regarding their requirements.

The Associate of Science in Law Enforcement degree requires the completion of the general education courses (see page 54) plus the following: P Sc 210, Soc 110, Soc 212, Soc 322, Soc 412, Psy 221, HPER 212, L E 100, L E 110, L E 150, L E 190, L E 200, L E 210, L E 250, L E 290. Electives should be selected, with advisor approval, from the fields of literature or science.

#### LAW ENFORCEMENT

#### 100 — Introduction to Law Enforcement

3 hrs. cr.

Municipal, county, state, and federal police organizations. History and administration of justice. Responsibilities and opportunities in the field of law enforcement.

#### 110 — Police Organization and Administration

2 hrs. cr.

Management operations, communications, budgeting, recruiting, training, and public relations as they pertain to the local and state law enforcement agencies.

### 150 — Interview and Report Writing

2 hrs. cr.

The techniques of interviewing and writing the report. The collection, recording, and preservation of evidence. How to preserve continuity in report writing. Law enforcement forms.

### 190 — Supervised Police Work

6 hrs. cr.

The student spends a specific amount of time in the local police department, the local sheriff's department, and with the highway patrol learning the standard line activities. The purpose is to introduce the student to the actual duties of law enforcement officers.

# 200 — Criminal Investigations

3 hrs. cr.

Fundamentals of criminal investigations including theory and history. Techniques appropriate to the specific type of crime are emphasized.

### 210 — Criminal Procedures

3 hrs. cr.

Types of criminal evidence for police; criminal procedures in various courts; arrest, search, seizure, collections of evidence, and related topics.

### 250 — Criminal Law

3 hrs. cr.

Criminal law purposes and functions; laws concerning arrest, search, and seizure. Rights and duties of officers and citizens in relation to local, state, and federal laws. The development, application, and enforcement of laws.

# 290 — Supervised Police Work

3 hrs. cr.

Principles of personnel management as applied to law enforcement agencies; evaluation, promotion, discipline, training, employer welfare, and problem-solving leadership.

#### MACHINE TECHNOLOGY

#### **Division of Semi-Professional and Technical Education**

Missouri Southern College offers an Associate of Science Degree in Machine Technology. The specialized course work in this curriculum is designed to prepare students for employment in the metal working industries. General education courses provide for growth as an individual and for constructive living in the family and nation.

The curriculum is college oriented. Students following this curriculum are regular members of the college student body and are expected and encouraged to participate in extracurricular activities.

The Associate of Science in Machine Technology requires the completion of the general education courses (see page 54) plus the following: Draf 101, Draf 130, Mach 100, Mach 110, Mach 150, Mach 160, Mach 210, Mach 220, Mach 230, Mach 250, Mach 260.

### 100 — Introduction to Machine Tool Processes 5 hrs. cr.

An introductory course covering the operation, safety, set-up, and theory of the six basic machine tools — the lathe, drill press, milling machine, grinders, shaper, and power saws — and the basic theory and operation of heat treatment and inspection equipment. Two one-hour lectures; three three-hour laboratories per week.

# 110 — Advanced Machine Tool Processes 5 hrs. cr.

The study and use of attachments and accessories for basic machine tools and the introduction of production machines: screw machines, turret lathe, tracer lathes, gear hob, electrical discharge machines, and chemical milling. Two one-hour lectures; three three-hour laboratories per week. Prerequisite: Mach 100.

# 150 — Technical Mathematics 3 hrs. cr.

The introduction and application of the basic concepts of math, geometry, and trigonometry to machine tool processes.

# 160 — Process Instrumentation 3 hrs. cr.

Teaches quality control, inspection and precision measurement procedures. Utilizes air and electronic gauging systems, optical measurement and related math. One one-hour lecture; two two-hour laboratories per week.

# 210 — Fundamentals of Cutting Tools

5 hrs. cr.

Introduction to tool geometry, chip formation, and effects of coolants and tool design on tool life. Instruction on the sharpening of standard cutting tools for drilling and on the applications of various factors on machinability. The use of carbides and ceramics as cutting tools. Two one-hour lectures; three two-hour laboratories per week. Prerequisite: Mach 110.

### 220 - Tool and Die Production

3 hrs. cr.

Advanced course on the designing, machining, and manufacturing of production tools and dies. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110, Mach 150, and Draf 110.

# 230 — Jig and Fixture Production

3 hrs. cr.

Advanced course on the designing, machining, and manufacturing of production jigs and fixtures. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110 and Draf 110.

### 250 — Numerical Control in Machining

3 hrs. cr.

The introduction to point-to-point and continuous path numerical control, part programming, operation of numerical control systems, and justification and maintenance of numerical control systems. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110, Mach 150, and Draf 110.

# 260 — Fundamentals of Metallurgy

3 hrs. cr.

Introduction to ferrous and non-ferrous metallurgy. Studies the physical properties of the various alloys, heat treatment of them, chemical properties of metals, applications of the various metals, machinability, tensile strength and hardness testing, and study of the grain structure of the various alloys. Two one-hour lectures, one two-hour laboratory per week.

### MARKETING AND MANAGEMENT

### **Division of Business and Economics**

Kirkendoll, Larimore, Miller, Tiede

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Marketing and Management approach. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

The requirements for the Semi-Professional and Technical Programs leading to Certificates of Achievement and Associate of Science degrees are found on pages 143-144.

### 90 — Introduction to Human Relations in Personnel Management

3 hrs. cr.

An introductory course in human relations with application of the dynamics of human behavior to industrial situations. Will not substitute for Personnel Management (MM 352) or apply to baccalaureate degree programs. Prerequisite: None. Offered in the Evening College only.

# 300 — Principles of Marketing

3 hrs. cr.

A survey of the major marketing methods, institutions and practices. The subjects of retailing, wholesaling, distribution channels, marketing legislation, advertising, cooperative marketing, pricing, marketing research and marketing cost are treated from the standpoint of consumers, middlemen, and manufacturers. Prerequisite: Econ 201 and 202.

# 312 — Retailing

3 hrs. cr.

Principles of successful retail management; analytical and research methods applicable to problems of retail management. Prerequisite: MM 300.

# 350 — Business Organization and Management

3 hrs. cr.

A course in business organization and management with application of concepts and techniques to specific, realistic case situations. Prerequisite: GB 101.

# 352 — Personnel Management

3 hrs. cr.

A study of the principles and practices of management with emphasis on the human factors, including procurement, development and maintenance of an effective work force. Prerequisite: MM 350 or consent of instructor.

#### MARKETING AND MANAGEMENT

### 401 — Advertising

3 hrs. cr.

Description of fundamental advertising principles and their application in mass marketing. Analysis of advertising media, the preparation of advertising, and formulation of campaigns. Prerequisite: MM 300.

### 412 — Marketing Management

3 hrs. cr.

Managerial aspects of marketing; problems involved in investigations of markets, planning the sales effort, management of sales and service personnel, and control of sales operations. Prerequisite: MM 350 and MM 300.

### 431 — Production Management

3 hrs. cr.

Principles and decision analysis related to the effective utilization of the factors of production in manufacturing activities for both intermittent and continuous systems. The study of production organizations, analytical models and methods, facilities design, and the design of control systems for production operations. Prerequisite: MM 350.

### 452 — Business Policy

3 hrs. cr.

An integrating course cutting across all fields of business administration. Cases pertaining to top management decision making are used. Prerequisite: MM 350.



### **MATHEMATICS**

### **Division of Natural Sciences and Mathematics**

Boehning, Cragin, Jensen, Jolly, Livingston, Martin, McCormick, Sankappanavar

A major for the Bachelor of Science degree consists of 36 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, plus 18 upper division hours in mathematics. In addition, 18 hours in physical sciences (excluding Chem 100 and Phys 100) are required.

A major for the Bachelor of Science in Education with mathematics as one teaching field (Plan B) consists of a total of 30 semester hours in mathematics. The required courses are: Math 150, Math 250, Math 260, Math 300, and 12 upper division hours in mathematics. In addition, 10 hours in the physical sciences are required.

A major for the Bachelor of Science in Education degree with mathematics as one of two teaching fields (Plan A) consists of 27 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, and 9 upper division hours in mathematics.

### 20 — Programmed Course in Beginning Algebra

2 hrs. cr.

# 30 — Programmed Course in Intermediate Algebra

2 hrs. cr.

Note: No more than 3 hours credit in programmed courses will count toward an associate degree and no credit will be given toward the baccalaureate degree.

### 100 — Slide Rule

1 hr. cr.

A laboratory course in the use of a log-log rule. Meets two hours a week. Prerequisite: Trigonometry or concurrent enrollment in Math 112 or 140.

# 110 — Introduction to College Mathematics I

3 hrs. cr.

Basic college mathematics with an introduction to sets and the logic of algebra. This course satisfies the requirement in mathematics for general education. Prerequisite: One year of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 20 with grade of C.

### 112 — Trigonometry

2 hrs. cr.

Study of trigonometric functions. Prerequisite: One and one half units of high school algebra, one unit high school geometry or permission of the instructor, and satisfactory score on the Mathematics Placement Test.

# 120 — Introduction to College Mathematics II

3 hrs. cr.

A continuation of Math 110. Sets of points, systems of numeration, metric geometry, modular systems, relations and functions, probability. Recommended for prospective elementary teachers. Prerequisite: Math 110.

# 130 — College Algebra

3 hrs. cr.

A course for students **not** majoring in the fields of math, science or engineering. Prerequisite: Two and one half units in high school math including geometry and a satisfactory score on the Mathematics Placement Test, or Math 30 with a grade of C or Math 110.

# 140 — Algebra and Trigonometry

5 hrs. cr.

This course is the equivalent of Math 112 and Math 130. Prerequisite: Three years of high school mathematics and satisfactory score on Mathematics Placement Test or either Math 30 or Math 110 with a grade of C.

# 142 — Introduction to Programming

2 hrs. cr.

A study of digital computer systems, programming of a digital computer and the solution of problems. Prerequisite: Math 140.

# 150 — Calculus with Analytic Geometry I

5 hrs. cr.

Differentiation and integration of algebraic and trigonometric functions, and plane analytic geometry using vectors. Prerequisite: Math 140 with a grade of C, or four units of high school mathematics and a satisfactory score on the Mathematics Placement Test.

# 250 — Calculus with Analytic Geometry II

5 hrs. cr.

Differentiation and integration of transcendental functions, polar coordinates, theory of limits, parametric equations. Applications to physical problems. Prerequisite: Math 150 with a grade of C.

# 260 - Calculus with Analytic Geometry III

5 hrs. cr.

Solid analytic geometry, infinite series, partial differentiation and multiple integrals. Prerequisite: Math 250 with a grade of C.

# 271 — Selected Topics in Mathematics

1 hr. cr.

A course to enrich the student's knowledge and promote his interest in various areas of mathematics, especially in the area of modern mathematics. Recommended for all Math majors. Prerequisite: Math 150.

# 300 — Fundamentals of Mathematical Thought 3 hrs. cr

An introduction to modern algebra and analysis. Sets, relations, functions, logical development of number systems, introduction to theory of groups, rings, integral domains, and fields. Prerequisite or corequisite: Math 260.

# 312 — Problems of Teaching Arithmetic in the Elementary Schools 2 hrs. cr.

(See Education 312 for description). Will not count toward a major in mathematics.

# 322 — Differential Equations

3 hrs. cr.

Standard types of ordinary differential equations of the first and second order, linear equations with constant coefficients and applications to geometry and physical science. Prerequisite: Math 260.

# 332 — Geometry

3 hrs. cr.

Concentrated Euclidian geometry theory from a modern axiomatic viewpoint. Includes an introduction to projective and differential geometry. Recommended for prospective secondary mathematics teachers. Prerequisite: Math 250.

# 342 — Abstract Algebra

3 hrs. cr.

Number theory, equivalence and congruence, theory of groups, rings, ideals, integral domains, and fields. Prerequisite: Math 300.

# 351 — Linear Algebra

3 hrs. cr.

The algebra of linear equations and matrices, vector spaces, linear mappings and transformations, determinants, bilinear and quadratic forms, linear functionals, vector inner products and cross products. Prerequisite or corequisite: Math 300.

# 361 — Probability and Statistics

3 hrs. cr.

Introduction to theory of probability and statistics using concepts and methods of calculus. The binomial and Poisson probability measures. The central limit theorem. Prerequisite: Math 260.

# 412 — Vector Analysis

3 hrs. cr.

Vector spaces, linear transformations, determinants, eigenvalues and diagonalization of symetric matrices, curl, divergence, gradient, multiple integrals, and the theorems of Green, Gauss, and Stokes. Prerequisite: Math 260.

#### MATHEMATICS

### 421 — Advanced Calculus I

3 hrs. cr.

A rigorous review of elementary calculus: Real number systems, continuous functions, functions of several variables, implicit functions. Prerequisite or corequisite: Math 300.

### 422 — Advanced Calculus II

3 hrs. cr.

Coordinate transformations, vectors, multiple integrals, Green's theorem, theory of integration, differential equations, Fourier Series. Emphasis on theory rather than applications. Prerequisite: Math 421.

### 431 — Numerical Analysis

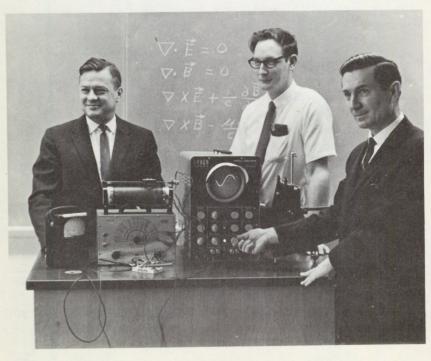
3 hrs. cr.

Digital computer programming, finite differences, numerical integration, matrix computation, numerical solution of non-linear differential equations. Solution of many problems on a digital computer. Prerequisite or corequisite: Math 322.

# 490 — Independent Study

1-3 hrs. cr.

Directed study according to the needs of the advanced student. Topics taught are not available in other scheduled courses. Prerequisite: Permission of the instructor.



### MUSIC

### **Division of Humanities and Fine Arts**

Elliott, D. Johnson, Sovereign, Taylor

The Department of Music offers courses leading to the degrees of Bachelor of Arts and Bachelor of Science in Education in either vocal or instrumental music. The Bachelor of Arts degree includes 37 hours of music. Required courses are Music 111-112, Music 221-222, Music 351-352, Music 421, Music 431, Music Ensemble, and 10 semester hours of Applied Music. Supporting courses may include 9 hours music.

The Bachelor of Science in Education degree with instrumental music as one teaching field (Plan B) includes 46 semester hours of music. Required courses are Music 111-112, Music 221-222, Music 134-135, Music 136-137, Music 181, Music 182, Music 431, Music 351, 352, Music 131, 132, Music 133, Music 211, Large Instrumental Ensemble, and 14 semester hours of Applied Music.

The Bachelor of Science in Education degree with vocal music as one teaching field (Plan B) includes 43 semester hours of music. Required courses are Music 111-112, Music 221-222, Music 181, Music 182, Music 421, Music 351, 352, Large Vocal Ensemble, and 10 semester hours of Applied Music.

Both instrumental and vocal majors must take a Piano Proficiency Examination during the second semester of the sophomore year. Should a student fail the examination, he must take piano for no credit, considering it his minor instrument until he has passed the examination.

The performing ensembles of the music department include the College Chorale, the College-Community Symphony Orchestra, the Concert Band, the Lab Band, the Vocal Ensemble, and the College-Community Choral Society. In addition to frequent performances by these groups, student recitals are held regularly.

The student must meet department requirements for recital attendance and recital appearance, including a senior recital or joint-recital.

The instrumental major must perform in a large instrumental ensemble, and the vocal major must perform in a large vocal ensemble during every semester of residency.

Students wishing to be certified to teach in both secondary and elementary schools may do so by adding the following courses: Music 260 and Psychology 200.

# 110 — Music Appreciation

3 hrs. cr.

Designed to give the non-music major an insight into musical masterpieces from all eras of music literature. No credit for music majors.

### 111-112 — Music Theory

(per sem.) 3 hrs. cr.

(111) Intensive study of basic materials of music developed through melodic, rhythmic, and harmonic dictation, sight-singing, keyboard and written harmony. Triads, their inversions and connections. For music majors. Others by consent of the instructor; (112) Includes seventh chords and their inversions and non-harmonic tones. Intensive work in ear-training and keyboard harmony. Prerequisite: Music 111. Five meetings per week.

### 121, 122 — Choir

(per sem.) 1 hr. cr.

Open to all college students by audition only. Preparation and performance of great choral works. Prerequisite: Permission of the instructor.

# 141, 142 — Lab Band

1 hr. cr.

A stage band open to all college students who are qualified instrumentalists. The Lab Band will prepare and present several concerts during the year, while dealing primarily with music of the jazz idiom. Prerequisite: Permission of the instructor.

# 151, 152 — Orchestra

1 hr. cr.

Open to all college students who play an orchestral instrument. The orchestra will present five public concerts each year, performing standard orchestral literature. Prerequisite: Permission of the instructor.

# 161, 162 — Vocal Ensemble

1 hr. cr.

Small select ensemble from the membership of the college choir. Performs all literature from madrigal to modern music, written for small vocal ensemble. Prerequisite: Membership in choir.

# 171, 172 — Brass Choir

1 hr. cr.

Performance of literature for brass ensemble. Open to all qualified students. One meeting per week.

# 180 — Choral Society

no credit

Open to all college students and area adults. The purpose of this course is to offer choral experiences for all college students and adults not eligible for the Chorale. Concerts will be scheduled throughout the year at the discretion of the conductor.

### 181 — Choral Conducting Techniques

1 hr. cr.

Technique of baton, factors in interpretation, score reading, rehearsal procedures for choral organizations, program building, and public appearances.

### 182 — Instrumental Conducting Techniques

1 hr. cr.

Technique of baton, factors in interpretation, score reading, rehearsal procedures for instrumental organizations, program building, and public appearances. Laboratory work with the college Concert Band and Orchestra.

### 191, 192 — Concert Band

(per sem.) 1 hr. cr.

Open to all college students who play a band instrument. Presents public concerts; functions as a "pep band" at school activities. Prerequisite: Permission of instructor.

### 211 — Marching Band Techniques

1 hr. cr.

Procedures used in organizing, promoting, drilling, transporting, uniforming, and sustaining a high school marching band. Deals with problems in charting a half time show and the coordinating of suitable music.

### 221-222 — Music Theory

(per sem.) 3 hrs. cr.

(221) Altered chords and modulation. Advanced work in eartraining and keyboard harmony. Introduction to contemporary techniques and composition in simple forms; (222) Modal harmony. Advanced part-writing procedures. Emphasis on keyboard harmony. Prerequisite: Mus 112. Five meetings per week.

# 262 — Music for the Elementary School

3 hrs. cr.

Emphasis on methods of teaching music in the elementary class-room and a study of materials to be used.

# 342 — Methods of Teaching Secondary School Music 2 hrs. cr.

Methods and materials used in teaching instrumental and choral music in junior high and high school. (See Educ 392)

# 351, 352 — History of Music

(per sem.) 3 hrs. cr.

(351) General survey of history of music from Greek period to 18th century; (352) From 18th century to the present. Score reading required.

# 421 — Form and Analysis

3 hrs. cr.

Harmonic and form analysis of compositions from classic era, formal analysis of compositions from pre-classic era, and introduction to contemporary principles. Prerequisite: Music 222.

#### 431 — Orchestration

2 hrs. cr.

Capacities of orchestral instruments. Scoring for various orchestral combinations, including full orchestra. Prerequisite: Music 222.

### 131 to 137 — Instrumental and Vocal Techniques 1 hr. cr.

131 Brass Techniques

132 Brass Techniques

133 Percussion Techniques

134 String Techniques

135 String Techniques

136 Woodwind Techniques

137 Woodwind Techniques

Class instruction in the orchestral and band instruments, including a study of methods and materials to be used in the teaching of a beginning student. Given on a laboratory basis with two recitations a week.

# 101 to 408 — Applied Music

101

102

203

204

305

306

407 408 1-2 hrs. cr.

Private instruction in piano, organ, voice, trumpet, trombone, French horn, violin, viola, cello, double bass, flute, clarinet, oboe, saxophone, bassoon, and percussion. Credit variable. One hour lessons per week in major. Jury examination required. Lessons by arrangement with approved instructors.



### **NURSING**

#### **Division of Semi-Professional and Technical Education**

Jacobs, Elgin, Ferry, Filosa

Missouri Southern College offers a nursing program leading to an Associate of Science Degree. Upon completion of the program the graduate is eligible to write the State Board Test Pool Examination to qualify for license as a Registered Nurse (R.N.). This program is accredited by the Missouri State Board of Nursing.

The nursing program is designed to prepare a graduate to give patient centered care in beginning general staff nurse positions. This program provides for the development of knowledge, skills, and attitudes expected of a registered nurse in general nursing practice through liberal arts, science, and specialty courses.

The Associate degree Nursing Program is designed to fulfill the educational needs of qualified high school graduates who want to study in a multi-purpose collegiate institution where they share the responsibilities, privileges, and intellectual and social experiences with all other students.

Applicants whose background in the Biological Sciences is deficient will be required to successfully complete a course in General Zoology, or the equivalent.

Applicants whose mathematic background is deficient (determined by the Mathematices Placement Test) will be required to successfully complete a course in Mathematics (Math 20-30 or the equivalent). The above requirements must be met before being considered for admission to the nursing curriculum.

The Associate of Science in Nursing degree consists of a minimum of 72 semester hours. The required courses include Nursing 100, Nursing 120, Nursing 130, Nursing 210, Nursing 240, Bio 221, Eng 101 and 102, Soc 110, HPER 101 and 102, Chem 100, Psy 100, Bio 231, PSc 120, and Speech 100.

# 100 — Fundamentals of Nursing

5 hrs. cr.

The study of principles and techniques fundamental to the practice of nursing. The course content focuses on basic physical, emotional, and cultural needs of people and their inter-relationships in health problems. The planned laboratory experiences are developed to assist the student in planning, providing, and evaluating patient-centered care. Principles and concepts of family development, mental health, nutrition, and pharmacology are correlated with nursing content. A review of the history of nursing is included. Three hours lecture; eight hours of clinical laboratory.

# 120 - Nursing in Physical Illness I

8 hrs. cr.

This course is planned for the study of the adult person whose care requires medical and/or surgical intervention. Continued use of the problem-solving approach in more complex nursing situations enables the student to apply new and previously acquired knowledge and skills. Principles and concepts of rehabilitation, diet therapy, and pharmacology, are correlated. A study of physical, mental and developmental concepts of the adult through senescence is included. Pre and post conferences are planned with the supervised clinical experience. Four hours lecture; twelve hours clinical laboratory. Prerequisite: Nursing 100.

# 130 — Nursing in Mental Illness

4 hrs. cr.

Course is designed to assist the student to gain increased knowledge of mental health concepts. A student is given the opportunity to gain increased knowledge and skill in communications. Laboratory experiences are planned to help the student gain an understanding of the effect of mental illness on normal adult development and application of nursing principles to the care of the mentally ill adult. Four hours lecture; twelve hours of clinical laboratory. Prerequisite: Nursing 120.

### 210 - Maternal and Child Health

10 hrs. cr.

Family centered course with emphasis on the nursing care of mothers during the maternity cycle. Normal growth and developmental and mental health concepts during this period of the life cycle are included. Emphasis is on individualized care in health and disease. Pre and post conferences are planned with the supervised clinical experience. Five hours lecture; fifteen hours of clinical laboratory. Prerequisite: Nursing 130.

# 240 - Nursing in Physical Illness II

10 hrs. cr.

Continuation of Nursing 120. Intended to help the student to further develop knowledge and skills necessary to provide individualized nursing care of the adult patient. Study of major health problems is continued with consideration of prevention, diagnosis, treatment, rehabilitation, and nursing care. Consideration is given to psychological, cultural, socio-economic, and developmental factors which may cause, complicate or affect the patient's treatment. Includes preparation for responsibilities and opportunities as a graduate nurse. Pre and post conferences are planned with the supervised clinical experience. Five hours lecture; fifteen hours of clinical laboratory. Prerequisite: Nursing 210.

### OFFICE ADMINISTRATION

### **Division of Business and Economics**

Compton, Cowan, Miner

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree and a Bachelor of Science in Business Education degree.

The requirements for the Semi-Professional and Technical Programs leading to Certificates of Achievement and Associate of Science degrees are found on pages 143-144.

#### 101 — Elementary Typewriting

3 hrs. cr.

The chief emphasis in this course is to learn to manipulate the typewriter efficiently. The development of speed is stressed so that the student will, upon completion of the course, have a fair rate which will be of use to him personally. A few simple letter styles are taught as well as manuscript writing and simple tabulation.

### 102 — Intermediate Typewriting

3 hrs. cr.

This is primarily a letter writing course. All the styles of business and personal letters are studied and written. Efficient methods of writing more difficult manuscript and tabulations are also studied. Minimum requirement for passing is the ability to type 40 words per minute for ten minutes with the 5-error limit. Prerequisite: OA 101 or a good knowledge of the keyboard.

# 111 — Elementary Shorthand

3 hrs. cr.

A theory course in which the principles of shorthand are studied. Vocabulary building is stressed. Not open to students who have completed one year of shorthand in high school. Typewriting should precede or parallel the course. Class meets five days per week.

#### 120 — Intermediate Shorthand

3 hrs. cr.

A dictation course in which the theory has been completed. It is a review of theory, and special attention will be given to developing efficient transcription procedures. Dictation will range from 60 to 100 words per minute. The minimum speed requirement by the end of the semester is to write at least 80 words per minute with 95 per cent accuracy. Prerequisite: OA 111 or any course in which the theory has been completed.

# 200 — Advanced Typewriting

3 hrs. cr.

Production of mailable letters, manuscripts, reports, addressing envelopes, business forms and legal typing is emphasized. Minimum

### OFFICE ADMINISTRATION, PHILOSOPHY

passing requirement is 60 words per minute for ten minutes with the 5 error limit. Prerequisite: OA 102 or the ability to type 40 words per minute and a knowledge of letter writing.

### 210 — Advanced Shorthand

3 hrs. cr.

The emphasis in this course is to develop accuracy in transcription as well as to increase the rate of transcription. Dictation will range from 80 to 140 words per minute. The minimum requirement by the end of the semester is at least 100 words per minute with 95 per cent or more accuracy. Prerequisite: OA 120 or the ability to take dictation at 80 words per minute.

### 220 — Dictation and Transcription

3 hrs. cr.

This is a course for the development of expert stenographers. A great deal of emphasis is placed upon accuracy and rate of transcription, and production of mailable letters. Dictation will range from 100 words per minute to 160 words per minute. The minimum requirement by the end of the semester is at least 120 words per minute with at least 95 per cent accuracy.

#### 230 — Secretarial Procedures

3 hrs. cr.

Business ethics, secretarial duties common to all lines of business, such as handling mail, meeting callers, using the telephone, etc. The student receives instructions in the use of present day filing systems and their application to the various types of business. This course is offered for sophomores in the Office Administration curriculum. Freshmen may be admitted by permission of the instructor.

# 330 — Methods of Teaching Business

2 hrs. cr.

Special methods of instruction problems, and difficulties peculiar to the teaching of each business subject; presentation of subject matter; content and arrangement of material, organization and administration. Prerequisite: At least one course in Education and one course in psychology. Two hours credit in Education (See Educ 330).

# **PHILOSOPHY**

# **Division of Humanities and Fine Arts**

A. Orr

# 201 — Introduction to Philosophy

3 hrs. Cr.

Comparative survey of major types of philosophy, and of representative problems in philosophy.

#### 212 — Ethics

3 hrs. cr.

Exploration of the problem of value, personal moral attitudes and standards, comparative survey of major ethical systems, and evaluation of the chief ethical struggles in contemporary society.

### **PHYSICS**

### **Division of Natural Sciences and Mathematics**

Cragin, Jensen, Sloan, Strobel

A major for the Bachelor of Science in Education degree with physics as a single teaching field (Plan B) consists of 30 semester hours of physics plus 18 hours in supporting subjects. The required courses are: Phys 250, Phys 260, Phys 322, Phys 331, Phys 351, Phys 362, Phys 371, Math 150, Math 250, Math 260, and Math 322. Five additional elective hours in physics are also required. (Note: Phys 100, Phys 151, Phys 152, Phys 272, and Phys 282 do not count toward a physics major but will count toward the 124 hours required for a baccalaureate degree.)

A major for the Bachelor of Science in Education degree with physics as one of two teaching fields (Plan A) consists of 22 semester hours of physics plus 18 hours in supporting subjects. The required courses are: Phys 250, Phys 260, Phys 322, Phys 362 or 371, Math 150, Math 250, and Math 260. Additional course requirements include: 6 elective, upper division hours in physics and 3 hours in an elective science.

### 100 — Fundamentals of Physical Science

5 hrs. cr.

Includes the basic concepts in fundamentals of physics, chemistry, and other physical sciences. Lecture, laboratory and demonstration periods.

# 151 — Elementary College Physics I

5 hrs. cr.

Study of mechanics, properties of matter, heat, wave motion and sound. Four hours of lecture and one two-hour laboratory per week. Prerequisites: Math 140 or Math 130 and permission of instructor.

# 152 — Elementary College Physics II

3 hrs. cr

Study of electricity, magnetism, light and topics from modern physics. Two hours of lecture and one two-hour laboratory per week. Prerequisite: Phys 151.

# 250 — General Physics I

5 hrs. cr.

Includes the study of mechanics, properties of matter, heat, wave motion and sound. The conservation laws of physics are emphasized. Four hours of lecture and one three-hour laboratory per week. Prerequisite: Math 150. Corequisite: Math 250.

# 260 — General Physics II

5 hrs. cr.

A study of electricity, magnetism, and light, with introductions to quantum properties of radiation and matter. Four hours of lecture

and one three-hour laboratory per week. Prerequisite: Phys 250. Corequisite: Math 260.

272 — Statics 3 hrs. cr.

The principles of mechanics as applied to problems of engineering in which the structures under consideration are in static equilibrium. Prerequisite: Phys 250. Corequisite: Math 260.

282 — Fundamentals of Electrical Engineering 3 hrs. cr.

D.C. networks; branch currents, loop currents and nodal methods; Norton's and Thevenin's theorems; simple magnetic circuits; inductance, capacitance. Three lecture hours per week. Prerequisite: Phys 260, or should be taken concurrently.

322 — Atomic and Nuclear Physics 3 hrs. cr.

A study of electrons, photo-electricity, relativity, quantum theory, positive rays, X-rays, elementary spectroscopy, radioactivity, atomic and nuclear structure, nuclear structure, nuclear energy, and fundamental particles. This course is designed for physics majors and engineering majors. Three hours of lecture per week. Prerequisites: Math 260 and Phys 260.

331 — Analytical Mechanics 3 hrs. cr.

Kinematics and dynamics of particles and systems of particles including the harmonic oscillator, potential functions, conservative fields of force, central force motion, energy, gravitation, rigid bodies and an introduction to the mechanics of continuous media. Three hours of lecture per week. Prerequisites: Math 260 and Phys 260.

342 — Heat and Thermodynamics 3 hrs. cr.

Temperature, transfer of heat, laws of thermodynamics, entropy, enthalpy, reversibility and irreversibility, thermal properties of materials, low temperature physics, change of phase, and kinetic theory. Three hours of lecture per week. Prerequisites: Math 260 and Phys 260.

351 — Electricity and Magnetism 3 hrs. cr.

Includes study of electrostatic forces, electric fields, electric potential, properties of conductors and dielectrics, magnetic fields, magnetic properties of matter, induced electromotive force, electric circuits, Maxwell's equations, and electromagnetic waves. Three hours of lecture per week. Prerequisites: Math 260 and Phys 260.

352 — Physical Optics 3 hrs. cr.

Wave motion, Huygen's principle and theories of light are studied. Analytical study of polarization, reflection, refraction, diffraction, dispersion, crystal optics, and electromagnetic theory of light is included. Three hours of lecture per week. Prerequisites: Math 260 and Phys 260.

### 362 — Intermediate Physics Laboratory

3 hrs. cr.

Experiments in mechanics, including mechanical wave phenomena, heat transfer, thermodynamic measurements, electrical measurements, precision calibration of electrical instruments, and geometrical and physical optics. Two three-hour laboratories per week. Prerequisite or corequisite: Phys 322.

### 371 — Modern Physics Laboratory

3 hrs. cr.

Experiments in ionization potentials, photoelectric effect, spectroscopy, detection and properties of nuclear radiation, and measurements of the charge and mass of the electron. Two three-hour laboratories per week. Prerequisite: Phys 322.

### 422 — Nuclear Physics

3 hrs. cr.

Radioactivity, nuclear stability, nuclear forces, nuclear structure, fission, fusion, dynamics of nuclear reactions, nuclear energy, neutron physics, particle accelerators and fundamental particles. Three hours of lecture per week. Prerequisite: Phys 322.

### **POLITICAL SCIENCE**

### **Division of Social Science**

Ahmed, Lowery, St. Clair

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government or community service will want to take the Bachelor of Arts degree. A political science major for this degree consists of 30 semester hours in Political Science. The student will select these courses in consultation with his adviser.

A political science minor consists of 20 semester hours in Political Science. For the minor the student will also select these courses in consultation with his adviser.

A social science major for the Bachelor of Science in Education degree, with an emphasis in Political Science (Plan B) consists of 47 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, 6 hours of upper division History courses, P Sc 120 and P Sc 210. For the remaining 24 hours the student will take Econ 202, 3 hours in Geography, 3 hours in Sociology and 15 hours in upper division Political Science courses.

#### 120 — United States Government

3 hrs. cr.

A study of the theories, objectives, problems, organization and functions of the United States Government and the Missouri State Constitution.

### 131 — United Nations

1 hr. cr.

Examines the structure, capabilities, values and limitations of the United Nations.

### 210 - State and Local Government

2 hrs. cr.

A study of general structure, problems and functions of state and local governments with emphasis on Missouri State Government.

#### 221 — International Relations

3 hrs. cr.

A study of the present-day relations and problems among the states of the world and the major factors which underline and influence these relations. Prerequisite: P Sc 110 or 120.

### 222 — Current World Affairs

3 hrs. cr.

Examines the current world problems, their causes, results and possible solutions.

### 231 — Introduction to Political Science

3 hrs. cr.

A study of the discipline of Political Science which deals with the foundation, organization, development and principles of political science.

### 301 — Political Parties

3 hrs. cr.

A study of the development, organization, and operation of political parties in the United States.

# 312 — American Presidency

3 hrs. cr.

Explores the various roles of the President of the United States and the importance of the office.

# 322 — Comparative Government

3 hrs. cr.

A study of the governments of selected European countries with special attention given to development of their political systems both in theory and practice. A comparison is made with American governmental institutions emphasized. Prerequisite: P Sc 110 or 120.

# 332 — Political Theory

3 hrs. cr

An examination of the political ideas which have developed the United States government.

# 342 — Municipal Government

3 hrs. cr.

Studies the structure, legal status, functions and organization of municipal government.

#### 451 — Public Administration

3 hrs. cr.

The concepts and practices of organizations and management in the executive departments of national, state, and local governments.

### 452 — Constitutional Law

3 hrs. cr.

A review of approaches to the study of judicial behavior.

461 — English Constitutional History (See History 461) 3 hrs. cr.

462 — American Constitutional History (See History 462) 3 hrs. cr.

#### 492 — Seminar in Political Science

3 hrs. cr.

A study of analytical reports, research and discussions, designed to give a broad knowledge of the discipline and methods of Political Science. Prerequisite: 6 hours upper division Political Science.

### **PSYCHOLOGY**

# **Division of Education and Psychology**

Bradshaw, Dryer, Gold, Guilliams, Niess, Smith, Starkey

A major for the Bachelor of Arts degree consists of 32 semester hours. A supporting area of 15 hours in biology and chemistry is also required. A supporting area of 15 hours in sociology, business or computer science is also available, but if selected, 10 hours of biology must accompany the 15 hours of sociology, business or computer science. Required courses in psychology are: Psy 110, Psy 311, Psy 312, Psy 451, Psy 452. A minor consists of 21 semester hours and must include Psy 312.

# 100 — General Psychology

3 hrs. cr.

An introductory course, stressing the importance of the psychological mechanisms underlying all mental processes, such as sensation, perception, emotion, thinking, and learning.

# 110 — Psychology of Human Development

5 hrs. cr.

An intensive study of the science of psychology; genetic, physiological, intellectual, social, and personality principles and concepts as they affect human development and behavior. (Should be taken in place of Psy 100 by education and psychology majors.)

#### 120 — Freshman Orientation

1 hr cr

This course is designed to help the student become adjusted to the college environment. Beginning with personal adjustment and

rules and regulations, the course broadens its scope to vocational orientation. It culminates with the advising and enrolling of the student in classes for the next semester.

### 200 — Child Psychology and Development

3 hrs. cr.

Behavior and growth patterns of children are studied. Psychological facts and principles which are necessary for the understanding of the child in his home and school environment. Prerequisite: Psy 100.

# 210 — Adolescent Psychology

3 hrs. cr.

A study of the development of the attitudes, interests, problems, and adjustments of the adolescent. A foundation for the proper evaluation of adolescent behavior. Prerequisite: Psy 100.

### 221 — Psychology of Personal Adjustment

3 hrs. cr.

A study of the basic problems of personality adjustment intended to aid the student in promoting better mental health for himself and to better understand the behavior of others.

# 302 — The Exceptional Child

2 hrs. cr.

Understanding and guiding the exceptional child through study of child growth and behavior. How to recognize and deal with specific problems of exceptional children.

# 310 — Educational Psychology

3 hrs. cr.

Study of the psychological problems involved in education and the practical application of psychological principles of teaching. Special emphasis placed on measurement, the nature of learning, and the environmental influences of behavior. Prerequisite: Psy200 or 210.

# 311 — Psychological Statistics

3 hrs. cr.

The measurement and evaluation of behavior and psychological experimentation by quantitative techniques. Prerequisite: 6 hours of psychology.

# 312 — Experimental Psychology

5 hrs. cr.

A laboratory course emphasizing the study of human behavior by scientific methods. Stresses experimental design and research techniques. Prerequisites: Psy 100 or 110 and 231.

# 341 — Social Psychology

3 hrs. cr.

Study of the social behavior of the individual, interests and tendencies that grow out of the community life in terms of intergroup and inter-personal relationships. Prerequisite: Psy 100.

# 412 — Measurement and Evaluation in Education and Psychology

3 hrs. cr.

A study of test construction and appraisal. Practice in evaluating and selecting tests, in administering and scoring, and in the analysis and presentation of test results.

# 432 — Abnormal Psychology

3 hrs. cr.

The nature and etiology of the various forms of behavior disorder, mental deficiency, and other deviations. Critical evaluation of current theories. Visits to hospitals. Prerequisite: Seven hours of psychology.

### 441 — Independent Study

1-3 hrs. cr.

By arrangement. A research problem of special interest or an intensive program of directed readings is scheduled and completed by each student, under the immediate direction of the instructor. Open only by permission of the department head.

# 451 — Psychology of Learning

3 hrs. cr.

Designed to acquaint the student with the major theories of learning. The theories will be analyzed, compared, and evaluated in the light of current research findings in the area of human and animal learning. Laboratory included. Prerequisite: 9 hours of Psychology.

# 452 — History and Systems of Psychology

3 hrs. cr.

A study of the various systems of psychology based on historical antecedents and their effects on contemporary scientific psychology. Prerequisite: 12 hours of Psychology.

# 471 — Group and Individual Intelligence Testing

5 hrs. cr.

A study of the individual intelligence tests with practice in the administering and interpreting of the scores. Emphasis is placed on the Binet and Wechsler Scales. Prerequisite: 9 hours of Psychology.

### **SOCIOLOGY**

### **Division of Social Science**

Eli, Grant, Gubera, Farber

A major for the Bachelor of Arts degree consists of 30 semester hours. The required courses are: Soc 110, Soc 212, Soc 311, Soc 321, Soc 421, and Soc 432. Supporting area required courses include: Bio 120 or Bio 202, and one course in general statistics or its equivalent. An additional supporting area of 15 hours is also required. The student selects this area in consultation with and by the approval of his adviser.

Sociology may also be used as a minor or supporting area with certain majors. A minor consists of 21 hours and must include Soc

110, Soc 321, and Soc 402.

A social science major for the Bachelor of Science in Education degree, with emphasis in Sociology (Plan B), consists of 50 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, and three upper division semester hours in U. S. History and three upper division semester hours in European History, Pol Sci 120 and 210, Econ 202, Geo 220, Soc 110, Soc 321 and electives in Sociology, 15 hours. Nine hours of the electives must be upper division.

# 110 — Introduction to Sociology

3 hrs. cr.

An introduction to the systematic study of society. The emphasis is on the major concepts of sociology and the scientific point of view in dealing with social phenomena.

# 121 — Family

3 hrs. cr.

Development of family relationships throughout the life cycle. Attention is given to courtship and engagement as well as factors promoting satisfactory family relationships.

# 152 — Introduction to Anthropology

3 hrs. cr.

Attention is given to both physical and cultural anthropology. There are comparisons between "preliterate" and "literate" cultures.

#### 202 - Social Work

2 hrs. cr.

The historical development, philosophy, and theory forming the basis for professional practice of social work; personal and educational requirements for career opportunities. Prerequisite: Soc 110.

### 212 — Social Problems

3 hrs. cr

Study of "problem areas" and "social issues" in modern society. Considers personality adjustment, strains, family problems, popula-

tion problems, forms of deviancy, and group conflict in a simulated laboratory atmosphere. The latter part of the course explores "solutions" and social engineering programs. Prerequisite: Soc 110.

### 301 — Sociology of Religion

3 hrs. cr.

Study of religion as a social institution. Comparative religions considered briefly. Major attention is given to the relationship of religion to other social institutions in contemporary society. Prerequisite: 6 hours of sociology.

#### 311 — Social Stratification

3 hrs. cr.

Analysis of the sociological processes in relation to social situations and interpersonal behavior. Study of factors which account for differences in influence, power, and social prestige. Prerequisite: Soc 110 or permission of the instructor.

#### 321 — Social Institutions

3 hrs. cr.

An analysis of the basic social institutions of human society; comparing and contrasting the structure and form among the various cultures, emphasizing interdependence and effect upon human behavior. Prerequisite: 6 hours of sociology.

# 322 — Criminology

3 hrs. cr.

Examines the social-cultural concepts of crime and the theories, agencies and institutions which deal with offenders. Particular attention is given to treatment of the offender, the causation of criminal and anti-social behavior, as well as to programs of crime prevention. Prerequisite: Soc 110 and Soc 212 or permission of the instructor.

# 341 — Social Psychology

3 hrs. cr.

(See Psy 341).

# 402 — The Community — Rural and Urban

3 hrs. cr.

Survey of the operation of social processes in groups which share common bonds of territory and cultural interests. Limited attention to the international community. Major attention to the American scene, including the regional, rural, urban, ethnic, and status communities. Prerequisite: 9 hours of sociology.

# 412 — Juvenile Delinquency

3 hrs. cr.

Consideration is given to environment and social background for the study of juvenile delinquency. Emphasis is placed upon fac-

tors of causation as revealed through personal, family and community situations conditioning delinquent behavior; analysis of concrete cases of juvenile delinquency; and examinations of current methods of dealing with juvenile offenders and programs for the prevention of delinquency. Prerequisite: Soc 110, Soc 322.

### 421 — Sociological Theory

3 hrs. cr.

Classical and contemporary social philosophy related to the current theoretical and applied systems of sociology. A study of social thought from Comte to Parsons, utilizing interpretation and evaluation of these philosophies as they relate to the present social conditions. Prerequisite: 9 hours of sociology.

# 432 — Sociological Investigations

3 hrs. cr.

Group and individual research in the scientific and methodological applications of sociology through quantitative and qualitative techniques of obtaining social data. Critical evaluation of the designs and methods used in sociological research and fieldwork. Prerequisite: 12 hours of sociology.

### SPEECH AND DRAMA

### **Division of Humanities and Fine Arts**

Brietzke, Harris, Hunt, G. Hunt, Bowman

A major for the Bachelor of Arts degree in technical drama and speech consists of 40 semester hours. Required courses are Speech 100 or 202, Speech 131, Speech 212, Speech 371, Drama 121, 122, 221, 222, Drama 331, 332, Drama 351, Drama 362, Drama 441, and Drama 442. English 331, 332 are also required.

A major for the Bachelor of Arts degree in performance in speech and drama consists of 43 semester hours. Required courses are Speech 100 or Speech 202, Speech 131, Speech 212, Speech 371, Drama 121, 122, 221, 222, Drama 331, 332, Drama 341, Drama 351, Drama 372, Drama 422, and Drama 432. English 331, 332 are also required.

A major in speech and drama in the Bachelor of Science in Education curriculum, one of two teaching fields, includes 37 semester hours of speech and drama, plus English 200 or English 301. Required courses in speech and drama are Speech 100 or Speech 202, Speech 131, Speech 212, Speech 371, Drama 121, 122, 221, 222, Drama 331, 332, Drama 351, Drama 372, and two of the following: Speech 411, Drama 341, or Drama 441.

A student wishing to be certified to teach speech and drama as one teaching field must complete 6 additional hours in speech and drama.

#### Drama

#### 110 — Introduction to the Theatre

3 hrs. cr.

Survey of contributions to dramatic production of all ages by playwrights, directors, designers. Appreciation of dramatic form and style. A humanities course for the non-drama major.

121, 122, 221, 222 — Theatre Laboratory (per sem.) 1 hr. cr.

A laboratory and, whenever possible, lecture course devoted to the mounting of major productions.

#### 201 — Summer Theatre Production

6 hrs. cr.

Includes active participation in the summer theatre presentations. Special instruction in voice and diction, movement, acting, and basic stagecraft.

NOTE: Drama 201 A summer theatre program running concurrently with the summer session is to be inaugurated in the summer of 1969. The first session will consist of at least two productions. A student enrolling in Drama 201 becomes a member of the resident company composed of area people, faculty, and students.

#### SPEECH AND DRAMA

### 331,332 — Development of the Drama

(per sem.) 3 hrs. cr.

(331) History and study of the development of theatre and theatre arts; forms, style, and structure of drama from the Greeks to the Elizabethan era; (332) Jacobean to contemporary American theatre.

# 341 — Beginning Acting

3 hrs. cr.

A basic performance and theory course, analysis and creation of a role; stage movement and pantomime; basic stage techniques. Problems in stage speech and dialects for the stage.

### 351 — Play Production

3 hrs. cr.

Techniques and problems of mounting a play. Includes a basic analysis of the construction of the drama, along with basic elements of costume, stagecraft, and make-up.

### 362 — Stage Costume and Design

3 hrs. cr.

Survey of available materials, period costume, and practical experience in the rendering of costume designs to actual stage costumes.

# 372 — Directing for the Stage

3 hrs. cr.

Study of the skill and role of the director, script analysis, casting, production administration, and director-actor relationships. Each student enrolled will have a directing project or will assist the staff as student director for a major production.

# 422 — Styles in Acting and Interpretation

3 hrs. cr.

Lecture and laboratory study of physical manners, posture, movement, rhythm, gestures, and vocal qualities in relation to various periods of theatre presentation. Prerequisite: Dr 341.

# 431 — Children's Theatre

3 hrs. cr.

Survey of all forms of literature for children for use in presentation. Laboratory study of various staging techniques in production for children.

# 441 — Elementary Stage Design

3 hrs. cr.

Principles and history of scenic design, sketching, rendering, scene painting techniques. Principles of stage lighting approached from practical and aesthetic values. Prerequisite: Dr 351.

# 442 — Advanced Stage Design

3 hrs. cr.

Study of design as related to various forms, styles of drama. Application of principles taught in Drama 441. Special problems in design, lighting. Prerequisite: Dr 441.

### Speech

### 100 — Speech Techniques

3 hrs. cr.

A practical course designed to improve or to develop selfexpression. Emphasis is placed on development of principles of effective oral communications. Prerequisite: Eng 101, or 50 percent or higher on English placement test.

### 131 — Voice and Articulation

3 hrs. cr.

Techniques for improving the speaking voice. Attention to phonetics, articulation, pronunciation, and general expression.

### 202 — Public Speaking

3 hrs. cr.

Practice in preparation and delivery of impromptu and extemporaneous speeches. Prerequisite: Eng 101 or 111 and completion of 1 unit of high school speech or Sp 100.

### 212 — Oral Interpretation

3 hrs. cr.

Study and application of principles and techniques of oral reading. Includes analysis of different types of literature with emphasis upon platform presentation of prose and poetry.

### 371 — Introduction to Speech Science

3 hrs. cr.

A study of the anatomy, psychology, and physics of speech including the examination of key research on the scientific bases of speech, and the theories and controversial concepts for personal identity, and for social control. Required of students concentrating in speech and recommended for those concentrating in drama.

#### 411 — Discussion

3 hrs. cr.

Study and application of procedures used in solving problems, determining policies, and resolving differences in committees or other small groups. Prerequisite: Sp 100 or Sp 202.

# 492 — Principles and Techniques of Speech Correction 3 hrs. cr.

A study of the nature, causes, diagnosis and treatment of speech defects of children and adolescents, primarily for the classroom teachers. Recommended for all students preparing to teach in any field.

### PRE-PROFESSIONAL CURRICULA

# Leading to the Associate of Arts Degree:

The Junior College transfer curricula are designed for students who desire later to work for a baccalaureate degree at Missouri Southern College or to transfer to other baccalaureate degree granting institutions. It should be clearly understood by the student that all such institutions have their own entrance requirements, and any student interested in such prospective transfer should consult the latest catalogues of those colleges. The curricula set forth in this section under various headings are ordinarily sufficient to satisfy requirements of other colleges and universities.

Students beginning their education in the Junior (or lower) Division of Missouri Southern College with the intentions of continuing their study in the Senior (or upper) Division leading to a baccalaureate degree should study the general education and major requirements for the baccalaureate degree.

The following pre-professional programs lead to the Associate of Arts degree and are normally transferable to other institutions. Each takes two years and 62 semester hours to complete. The curricula requirements are:

### 1. Pre-Agriculture.

- a. General education (see page 52).
- b. Five semester hours each in chemistry, botany or zoology, and economics.
- c. Three semester hours each in algebra, accounting, psychology (general), and sociology.
- d. Ten hours of electives, selected according to transfer needs.
- e. All courses must be approved by the adviser.

### 2. Pre-Dental

- a. General education (see page 52).
- b. Eight hours of chemistry, five of zoology, five of anatomy and physiology, and eight of physics.
- c. Six hours of electives, selected according to transfer needs.

# 3. Pre-Engineering.

The student entering pre-engineering must present four high school units in mathematics and one unit in a laboratory science.

- a. General education (see page 52).
- b. Mathematics 150, 250 and 260 (15 hrs.)
- c. Chemistry 101 and 102 (8 hrs.)
- d. Drafting 110 and 120\* (6 hrs.)

#### PRE-PROFESSIONAL CURRICULA

e.	Physics 250 and 260	(10	hrs.)
	Electives	(4	hrs.)

\*Drafting 120, Descriptive Geometry, is not required for chemical or electrical engineers.

### 4. Pre-Journalism.

The student planning to enter a journalism school must complete 60 credit hours in Arts and Science, including the following specific requirements:

a. General education (see page 52).

b.	One foreign language	(13 hrs.)
	Economics	( 3 hrs.)
d.	U. S. Government	( 3 hrs.)
e.	English Literature	( 6 hrs.)

f. Electives should be chosen from sociology, psychology, philosophy, mathematics, accounting, English, and journalism. (8 hrs.)

#### 5. Pre-Medical.

a.	General	education	(see page	52).
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b.	One foreign language.	(10 hrs.)
c.	Chemistry, qualitative analysis	(11 hrs.)

d. Zoology, anatomy and physiology (10 hrs.)

e. Physics (8 hrs.)

# 6. Pre-Optometry.

a. General education (	(see	page	52).
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b. English literature	( 3 hrs.)
c. Algebra and trigonometry	( 5 hrs.)
d. Zoology	( 5 hrs.)
e. Chemistry	( 8 hrs.)
f. Physics	( 8 hrs.)
	101 1

g. General psychology (3 hrs.)

h. Electives, according to transfer needs (5 hrs.)

# 7. Pre-Pharmacy.

a.	General	education	(see page 52).
1	A1 I		

D.	Algebra and trigonometry	( 5 nrs.)
c.	Zoology and botany	(10 hrs.)
d.	General chemistry	( 8 hrs.)
e.	Physics	( 8 hrs.)
f.	Accounting	( 3 hrs.)

g. Qualitative and quantitative analysis (8 hrs.)

# Leading to a Baccalaureate Degree:

1. Pre-Law.

Pre-law students normally work for the Bachelor of Arts degree with a major in English, history, or political science. Consult catalog of law school to which you hope to transfer for directives from that institution.

2. Pre-Medical Technology.

The curriculum leading to the Bachelor of Science in Medical Technology degree emphasizes biology and chemistry. The first three years (6 semesters), 94 semester hours, must be completed at Missouri Southern College (transfer credit will be considered, but the last 30 of the 94 required hours must be earned at MSC); the fourth year must be satisfactorily completed at a school of medical technology approved by the Council on Medical Education and Hospitals of the American Medical Association.

Course requirements include the general education courses for the Bachelor of Science degree plus the following: Bio 120, Bio 211 or 231, Bio 221, and one elective in biology (Bio 432 is strongly recommended); Chem 101, Chem 102, Chem 201, and one course selected from Chem 162, Chem 301 or Chem 421. In addition, a minimum of three semester hours in mathematics is required and a course in physics is strongly recommended.

After satisfactory completion of the program of study at St. John's Hospital School of Medical Technology (or other approved school) and passing the National Registry Examination conducted by the Board of Registry of Medical Technologists, the student qualifies for the degree of Bachelor of Science in Medical Technology from Missouri Southern College.

# SEMI-PROFESSIONAL AND TECHNICAL CURRICULA Leading to the Associate of Science Degree

The courses of study leading to the Associate of Science degree in Automotive Technology, Computer Science, Drafting and Design, Law Enforcement, Machine Technology, and Nursing are described in the "Curriculum" section of this catalog under their respective headings (see pages 65, 73, 76, 110, 112, 124). The Suggested Orders of Study for these programs are found on pages 145-161, immediately following this section.

Additional two-year programs leading to the Associate of Science degree are available in Accounting, General Business, and Secretarial Science.

1. Accounting.

The curriculum prepares students to enter public accounting

# SEMI-PROFESSIONAL AND TECHNICAL

firms, industry, banking and government service as accounting assistants or accounting clerks.

The degree requires completion of:

- a. General education. (See page 54)
- b. Acct 101, 102, Acct 211, Acct 212, Acct 401, Econ 201, 202, GB 101, GB 121, GB 301, MM 350, and OA 102 or OA 200.
- c. Five hours of electives which should be selected from business law, auditing, statistics, or mathematics.
- 2. General Business.

In this program the student prepares for supervisory and managerial positions, or for operating a private business. It provides the fundamental knowledge of marketing and management required for effective business operations. Practical techniques, skills of communication, and good human relations are developed.

The degree requires completion of:

- a. General education. (See page 54)
- b. Acct 101, 102, Econ 201, 202, GB 101, GB 301, 302, MM 300, MM 350.
- c. Fourteen credit hours of electives selected from the business areas of personnel management, advertising, retailing, salesmanship, and business communications. Selections from psychology are also valid.
- 3. Secretarial Science.

The secretarial science program helps prepare the student for the professional secretary position. The degree requires completion of:

- a. General education. (See page 54)
- b. Acct 101, GB 101, GB 301, OA 200, OA 220, and OA 230.
- c. Electives may include prerequisite courses to OA 200 and OA 220 if needed. Others should be selected from business organization and management, accounting, economics, geography, business communications, general psychology, and office machines.

# **Leading to a Certificate of Achievement:**

# Secretarial-Typist.

A one-year secretarial certificate program that provides students with training essential to obtaining employment as a secretarial-typist. Successful completion of the required curriculum qualifies the student to a Certificate of Achievement.

The certificate requires the completion of: Acct 101, Eng 101, GB 101, GB 121, GB 220, OA 200, OA 210, OA 220, and Speech 100.

Below are suggested orders of study for some of the college degree offerings. The four-year, baccalaureate programs are listed first. These are followed by the two-year, associate degree programs.

#### **BACCALAUREATE PROGRAMS**

# **BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION**

### **Accounting Approach**

# **Suggested Order of Study**

#### 1st Semester

#### 2nd Semester

#### **FRESHMAN**

FRESHMAN					
	3 3 1 3 3 1 2 —		3 3 1 3 2 — 15		
S.C.	16 OPHON	AOPE	13		
Acct 212 Intermediate Accounting I Econ 201 Principles of Economics Bio 100 General Biology Speech 100 Speech Techniques PSc 120 United States Government	3 3 5 3 3 3 — 17	ACCT 301 Intermediate Accounting II Econ 202 Principles of Economics Phys 100 Fundamentals of Physical Science HPER 160 Personal Health GB 220 Business Communications	3 5 2 3 - 16		
	JUNIC	OR			
Acct 211 Cost Accounting GB 301 Business Law MM 300 Principles of Marketing Econ 300 Money and Banking Fine Arts	3 3 3 3 3	Acct 302 Advanced Accounting GB 302 Business Law GB 321 Business Statistics Econ 350 Corporate Finance Humanities	3 3 3 3		
	15		15		
	SENIC	OR .			
Acct 411 Auditing Acct 401 Tax Accounting MM 350 Business Organization and Management Humanities Electives	3 3 3 3	Elective in Accounting MM 352 Personnel Management Electives	3 9 — 15		
	15				

#### BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

# **General Business Approach**

# **Suggested Order of Study**

#### 1st Semester

#### **2nd Semester**

#### **FRESHMAN**

Course	Hours	Course Ho	urs
Eng 101 Composition	3	Eng 102 Composition	3
Psy 100 General Psychology	3	Hist 110 U. S. History 1492-1877	3
HPER 101 Introduction to Physic	al 1	HPER 102 Introduction to	1
Activities I		Physical Activities II	
GB 101 Introduction to Business	3	Math 110 Introduction to College	3
Acct 101 Elementary Accounting	1 3	Mathematics I	
Psy 120 Freshman Orientation	1	Acct 102 Elementary Accounting II	3
Electives	2	Electives	2
	_		-
	16		15

### **SOPHOMORE**

Acct 212 Intermediate	3	Acct 301 Intermediate	3
Accounting I		Accounting II	
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Bio 100 General Biology	5	Phys 100 Fundamentals of	
Speech 100 Speech Techniques	3	Physical Science	
PSc 120 United States Government	3	HPER 160 Personal Health	2
	_	GB 220 Business Communications	3
	17		

# **JUNIOR**

Acct 211 Cost Accounting	3	Acct 302 Advanced Accounting	3
GB 301 Business Law	3	GB 302 Business Law	3
MM 300 Principles of Marketing	3	GB 321 Business Statistics	3
Econ 300 Money and Banking	3	Econ 350 Corporate Finance	3
Fine Arts	3	Humanities	3
	_		
	15		15

# **SENIOR**

Acct 411 Auditing	3	Elective in Accounting	3
Acct 401 Tax Accounting	3	MM 352 Personnel Management	3
MM 350 Business Organization and Management	3	Electives	9
Humanities	3		15
Electives	3		
	_		
	4=		

# BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

# **Marketing and Management Approach**

# **Suggested Order of Study**

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#### 2nd Semester

#### **FRESHMAN**

Course	Hours	Course Hours
Eng 101 Composition	3	Eng 102 Composition 3
Psy 100 General Psychology	3	Hist 110 U. S. History 1492-1877 3
HPER 101 Introduction to	1	HPER 102 Introduction to 1
Physical Activities I		Physical Activities II
GB 101 Introduction to Busines	ss 3	Math 110 Introduction to College 3
Acct 101 Elementary Accountin	g 1 3	Mathematics, Math 130
Psy 120 Freshman Orientation	1	College Algebra or
Electives	2	Equivalent
		Acct 102 Elementary Accounting II 3
	16	Electives 2-3
		15-16

#### **SOPHOMORE**

Bio 100 General Biology	5	Phys 100 Fundamentals of	5
Speech 100 Speech Techniques	3	Physical Science	
PSc 120 United States Government	3	Humanities	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
HPER 160 Personal Health	2	GB 220 Business Communications	3
	_	Electives	3
	16		_
			17

# **JUNIOR**

GB 301 Business Law Fine Arts MM 300 Principles of Marketing MM 350 Business Organization and Management	3 3 3 3	GB 302 Business Law GB 321 Business Statistics Econ 350 Corporate Finance MM 352 Personnel Management MM 312 Retailing	3 3 3 3 3
Econ 300 Money and Banking	3		_
	_		15
	15		

#### **SENIOR**

Humanit	ies	3	MM 412 Marketing Management	3
MM 401	Advertising	3	MM 452 Business Policy	3
MM 431	Production Management	3	Electives in Business or Economics	3
Electives		6	Electives	6
		_		_
		15		15

#### **BACHELOR OF SCIENCE**

# **Mathematics Major**

# **Suggested Order of Study**

(Freshman Year Only)

#### 2nd Semester 1st Semester

Course	Hours	Course H	lours
Eng 101 Composition	3	Eng 102 Composition	3
Math 150 Calculus with Analytic Geometry I	5	Math 250 Calculus with Analytic Geometry II	5
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	3
(General Education Course)	2	(General Education Course)	3
HPER 151 Foundations of Physical Activities I	1	HPER 152 Foundations of Physical Activities II	1
Psy 120 Freshman Orientation	1 _	Math 271 Selected Topics in Mathematics	1
	17		_
			16

# BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN BUSINESS

**Suggested Order of Study** 

Option B — Single Teaching Field

2nd Semester

# 1st Semester

#### **FRESHMAN**

Course	Hours	Course Ho	ours
Eng 101 Composition	3	Eng 102 Composition	3
Hist 110 U. S. History 1492-1877	7 3	PSc 120 United States	2-3
Humanities	3	Government or	
Psy 100 General Psychology	3	PSc 210 State or Local Government	
HPER 101 Introduction to	1	Speech 100 Speech Techniques	3
Physical Activities I		Humanities	3
Psy 120 Freshman Orientation	1	HPER 102 Introduction to	1
Electives	2	Physical Activities II	
	_	Math 110 Introduction to College	3
	16	Mathematics or Math 130	)
		College Algebra	
		_	_
		15	5-16

SOPHO	MORE	
Phys 100 Fundamentals of 5	Bio 100 General Biology	5
Physical Science	Econ 202 Principles of Economics	3
Humanities 3	GB 121 Office Machines	3
HPER 160 Personal Health or 1-2	Acct 102 Elementary Accounting II	3
one Activity course	Psy 210 Adolescent Psychology	3
Econ 201 Principles of Economics 3		-
Acct 101 Elementary Accounting I 3		17

15-16

# **JUNIOR**

Acct 301 Intermediate Accounting Acct 302 Advanced Accounting CACCT 401 Tax Accounting GB 301 Business Law OA Shorthand or a business election MM 350 Business Organization and Management One activity course if needed	3. 3	Course Hour GB 302 Business Law GB 220 Business Communications Psy 310 Educational Psychology OA Typewriting OA Shorthand or a business elective	3 3 3
	15-16		
	SENI	OR	
Educ 330 Structure of Teaching — Secondary	5	Professional semester 1	5
Business electives (No. 300 or above)	12		
	_		
	17		

# **BACHELOR OF SCIENCE IN EDUCATION**

Men's Physical Education (Qualifies a person to teach at both Secondary and Elementary Levels, Plan B)

**Suggested Order of Study** 

1st Semester

2nd Semester

16

#### **FRESHMAN**

IKLSHIVIAN				
Course	Hours	Course	Hours	
Eng 101 Composition	3	Eng 102 Composition	3	
Hist 110 U. S. History 1492-1877		Hist 120 U. S. History 1877 to the Present	3	
HPER 151 Foundations of Physical Activities I	4	Psy 110 Psychology of Human	5	
Phys 100 Fundamentals	5	Development		
Psy 120 Freshman Orientation	1	HPER 152 Foundations of Physical Activities II	4	
	16	Thysical Activities in		
	10		15	
	SOPH	OMORE		
Bio 120 Zoology	5	Speech 100 Speech Techniques	3	
Math 110 Introduction to College		Music 110 Music Appreciation o Art 110 Introduction to	or 3	
Soc 152 Anthropology	3	Contemporary Art		
Eng 120 or 130 World Literature	3	Psy 310 Educational Psychology	3	
HPER 260 Advanced Swimming and Senior Life Saving	2	PSc 210 State Government Elective	2 2	

16

1st Semester

## **JUNIOR**

Course	Hours	Course He	ours
HPER 370 School and	3	HPER 342 Kinesiology	4
Community Health		HPER 312 P.E. for Elementary	4
Bio 221 Human Anatomy	5	Schools	
and Physiology		HPER 410 History and Philosophy	3
Educ 330 Structure of Teaching	5	of Physical Education	
Elective	3	HPER 452 Theory of Track	2
	_	HPER 450 Theory of Basketball	2
	16	The state of the s	_
			15
	SENI	OP	
	SEINI	OK	
HPER 350 Care and Prevention	3	PROFESSIONAL SEMESTER	
HPER 470 Organization and	3	Psy 412 Measurements and	3
Administration of		Evaluation	
Physical Education		Educ 402 History and Philosophy	3
HPER 431 Administration of the	2	of Education	
Co-Curricular Program	ns	Educ 432 Critical Issues in	3
HPER 451 Theory of Football	2	Education	
HPER 421M Theory and Analysis	3	(Educ 444 Student Teaching	(3)
of Selected Team a	and	Elementary)	
Individual Sports		(Educ 464 Student Teaching	(3)
Elective	3-4	Secondary)	
-		or Educ 462 Student Teaching	6
	16-17	Secondary	
			_
			15

# **BACHELOR OF SCIENCE IN EDUCATION**

**Women's Physical Education** 

(Qualifies a person to teach at both Secondary and Elementary Levels, Plan B)

# **Suggested Order of Study**

**2nd Semester** 

FRESHMAN					
Eng 101 Composition	3	Course	Hours		
Hist 110 U. S. History 1492-1877	3	Eng 102 Composition	3		
HPER 151 Foundations of Physical Activities I	4	Hist 120 U. S. History 1877 to the Present	3		
Phys 100 Fundamentals of Physical Science	5	Psy 110 Psychology of Human Development	5		
Psy 120 Freshman Orientation	1 _	HPER 152 Foundations of Physical Activities II	4		
	16		_		
			15		

#### **SOPHOMORE**

30	PHON	IOKE	
Course Bio 120 Zoology Math 110 Introduction to College Mathematics I Soc 152 Anthropology Eng 120 or 130 World Literature HPER 260 Advanced Swimming and Senior Life Saving	urs 5 3 3 3 2 — 16	Course  Speech 100 Speech Techniques Music 110 Music Appreciation or Art 110 Introduction to Contemporary Art Psy 310 Educational Psychology Eng 210 or 220 English Literature PSc 210 State Government Elective	un 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
	JUNIO	R	
HPER 370 School and Community Health Bio 221 Human Anatomy and Physiology Educ 330 Structure of Teaching HPER 212 First Aid and Safety	3 5 5 3 - 17	HPER 342 Kinesiology HPER 312 P.E. for Elementary Schools HPER 410 History and Philosophy of Physical Education HPER 352 Rhythmic Form and Analysis HPER 422W Theory and Analysis of Selected Team and Individual Sports	3 3 3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
	SENIO	R	
HPER 470 Organization and Administration of Physical Education HPER 431 Administration of the Co-Curricular Programs HPER 421W Theory and Analysis of Selected Team and Individual Sports Elective	3 3 3 6 15	PROFESSIONAL SEMESTER: Psy 412 Measurement and Evaluation Educ 402 History and Philosophy of Education Educ 432 Critical Issues in Education (Educ 444 Student Teaching Elementary) (Educ 464 Student Teaching Secondary) or Educ 462 Student Teaching Secondary	3 3 (3 (3 6

#### **BACHELOR OF SCIENCE IN EDUCATION**

# **Elementary Education Major Suggested Order of Study**

1st Semester

**2nd Semester** 

# FRESHMAN

FRESHMAN				
Course Ho	urs	Course He	ours	
Eng 101 Composition	3	Eng 102 Composition	3	
Hist 110 U. S. History 1492-1877	3	Hist 120 U. S. History 1877	3	
Psy 110 Human Development	5	to the Present		
Math 110 Introduction to College	3	Bio 100 General Biology	5	
Mathematics I		Math 120 Introduction to College	3	
HPER 101 Introduction to	1	Mathematics II		
Physical Activities I		HPER 102 Introduction to	1	
Psy 120 Freshman Orientation	1	Physical Activities II		
*	_	PSc 210 State Government	2	
	16		_	
			17	
SC	OPHO	MORE		
Eng 120 or 130 World Literature	3	Speech 100 Speech Techniques	3	
Phys 100 Introduction to	5	Psy 310 Educational Psychology	3	
Physical Science		Art 220 Art Education	3	
Art 110 Introduction to	3	Hist 201 or 202 European History	3	
Contemporary Art or Mus	,	Eng 210 or 220 English Literature	3	
110 Music Appreciation		Ling 210 of 220 English Enterature	3	
Geog 211 Regions and Nations	3		17	
Elective	2		"	
21001110	_			
	16			
	JUNIO	np.		
F== 301 St====================================				
Eng 301 Structure of American	3	HPER 370 School and Community	3	
English	•	Health		
HPER 311 P.E. in Elementary Schools	2	Educ 312 Problems in Arithmetic	2	
Educ 220 Structure of Teaching	-	Bio 310 Field Biology	2	
Educ 320 Structure of Teaching	5	Psy 302 Exceptional Child	2	
Educ 340 Language Arts	5	Music 262 Music for Elementary	3	
and Reading		School		
	17	Elective	3	
	1/		45	
	SENIC	מר	15	
Educ 370 Introduction to				
Instructional Media	2	PROFESSIONAL SEMESTER:		
	14	Educ 432 Critical Issues in	3	
Electives (upper Div.)	14	Education		
	16	Educ 402 History of Education	3	
	10	Psy 412 Measurement and		
		Evaluation or	-	
		Educ 412 Social Foundation of	3	
		Curriculum Developmen		
		Educ 442 Student Teaching	6	
		Elementary		
			-	

NOTE: Students whose last names begin A-L should take the Professional Semester during first semester. Those beginning M-Z during second semester.

# **BACHELOR OF ARTS**

# **Psychology Major**

### Suggested Order of Study

#### 1st Semester

#### 2nd Semester

#### **FRESHMAN** Course Hours Course Hours 3 Eng 101 Composition 3 Eng 102 Composition 3 Hist 120 U. S. History 1877 3 Hist 110 U. S. History 1492-1877 to the Present Math 110 Introduction to College 3 5 Mathematics I Bio 120 General Zoology Psy 110 Psychology of Human 5 Psy 221 Personal Adjustment 3 HPER 102 Introduction to 1 Development Physical Activities II HPER 101 Introduction to 1 Physical Activities I 15 Psy 120 Freshman Orientation 1 16 **SOPHOMORE** 5 Ger 102 Intermediate German 5 Ger 101 Elementary German Bio 221 Human Anatomy 5 Chem 100 Introduction to 5 and Physiology Chemistry or Chem 101 Eng 210 or 220 English Literature Soc 110 General Sociology 3 3 Eng 120 or 130 World Literature HPER 160 Personal Health 2 3 16 15 **IUNIOR** 5 Psy 312 Experimental Psychology Psy 311 Statistics 3 5 Psy 430 Abnormal Psychology 3 Bio 331 Comparative Chordate 2 Anatomy Psy 210 State Government Art 110 Introduction to Psy 341 Social Psychology 3 Contemporary Art or Elective (Upper Division) 3 Music 100 Music Appreciation 3 3 Elective (Upper Division) 16 16 **SENIOR** 3 Psy 451 Psychology of Learning 3 Psy 452 History and Systems of Psychology Psy Electives (Upper Division) 6 Electives (Upper Division) 7 Psy 441 Independent Study 3 Electives (Upper Division) 10 16 16 Suggested Electives: Phil 201 Introduction to Philosophy Soc 152 Introduction to Anthropology Soc 311 Social Stratification Soc 202 Social Work Bio 202 Genetics Soc 322 Criminology Comp 100 Basic Computing Machines Bio 310 Field Biology Comp 120 Introduction to Bio 431 Animal Physiology **Programming** Bio 462 Embryology Soc 212 Social Problems **Psychology Electives:** Psy 310 Educational Psychology Psy 200 Child Psychology Psy 412 Measure and Evaluation Psy 210 Adolescent Psychology Psy 471 Individual Intelligence Tests

Psy 221 Personal Adjustment

#### ASSOCIATE OF ARTS DEGREE

# **Pre-Engineering**

# **Suggested Order of Study**

# (Freshman Year Only)

#### 1st Semester

#### 2nd Semester

Course		Hours	Course	ours
Eng 101	Composition	3	Eng 102 Composition	3
Math 15	0 Calculus & Analytic	5	Math 250 Calculus & Analytic	5
	Geometry I		Geometry II	
Chem 1	01 General Chemistry I	5	Chem 102 General Chemistry II	3
*Draf 110	Introductory Drafting	3	*Draf 120 Descriptive Geometry	3
HPER 10	1 Introduction to	1	Phys 250 General Physics I	5
	Physical Activities I		or	
Psy 120	Freshman Orientation	1	**Chem 162 Qualitative Analysis	3
		_	General Education	3
		18		
			17 +	10

17 to 19

<sup>\*</sup> Required of civil and mechanical engineers. Student should check catalog of the College to which he expects to transfer for requirements in this area.

<sup>\*\*</sup> Chemical Engineers must choose Chem 162 instead of Phys 150 and choose 3 to 5 hours of General Education requirements.

# SEMI-PROFESSIONAL AND TECHNICAL EDUCATION

#### ASSOCIATE OF SCIENCE

# Accounting

# **Suggested Order of Study**

4		-					
п	st	-	P	m	PS	te	r

#### 2nd Semester

#### FIRST YEAR

Course He	ours	Course H	ours
Eng 101 Composition	3	Psy 100 General Psychology	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary Accounting II	3
GB 101 Introduction to Business	3	Speech 100 Speech Techniques	3
GB 121 Office Machines	3	OA 102 Intermediate Typewriting	3
Math 20-30 Beg. & Inter. Algebra		P Sc U. S. Government	3
(or Math 110)	3	HPER 102 Introduction to	1
HPER 101 Introduction to	1	Physical Activities II	
Physical Activities I			_
Psy 120 Freshman Orientation	1		16
	-		
	17		

# SECOND YEAR

Bio 100 General Biology	5	Acct 301 Intermediate Accounting	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Acct 212 Intermediate Accounting	3	MM 350 Business Org. and M'gmt.	3
Acct 401 Tax Accounting	3	Acct 211 Cost Accounting	3
GB 301 Business Law	3	Elective	3
	_		_
	17		15

### ASSOCIATE OF SCIENCE

# **Automotive Technology**

# Suggested Order of Study

#### 1st Semester

#### 2nd Semester

# FIRST YEAR

Course	Hours	Course Hours
Eng 101 Composition	3	Eng 102 Composition 3
Phys 100 Fundamentals of	5	Acct 101 Accounting (or Business 3
Physical Science		& Shop Records, Auto 130)
Auto 110 Technical Mathematic	s 3	Draf 110 Introductory Drafting 3
Auto 100 Automotive Engines	5	Psy 100 General Psychology 3
HPER 101 Introduction to	1	Auto 120 Automotive Electrical, 5
Physical Activities I		Ignition, and Carburetion
Psy 120 Freshman Orientation	1	Systems
	_	HPER 102 Introduction to 1
	18	Physical Activities II

#### SECOND YEAR

Hist 110 U. S. History 1492-1877 Auto 190 Technical Science Auto 200 Automotive Chassis, Brakes, and Transmissions Auto 220 Automotive Refrigeration and Air-conditioning	3 4 5	Speech 100 Speech Techniques GB 301 Business Law Auto 260 Automotive Servicing Auto 250 Automotive Body and Paint	3 3 5 5
and An-conditioning	 15		16

# ASSOCIATE OF SCIENCE

# **Computer Programming**

# **Suggested Order of Study**

#### **1st Semester**

# **2nd Semester**

#### FIRST YEAR

Course	lours	Course Ho	urs
Eng 101 Composition	3	P Sc 120 U. S. Government	3
Math 130 College Algebra	3	GB 220 Business Communications	3
(or Math 110)		Acct 102 Elementary Accounting II	3
Acct 101 Elementary Accounting	1 3	Comp 120 Introduction to	3
Comp 100 Basic Computing	3	Programming	
Machines		Speech 100 Speech Techniques	3
Comp 110 Key-Punch Operation	3	HPER 102 Introduction to	1
HPER 101 Introduction to	1	Physical Activities II	
Physical Activities I			_
Psy 120 Freshman Orientation	1		16
	17		

#### SECOND YEAR

Phys 100 Fundamentals of	5	Comp 150 Computer Machines	3
Physical Science		and Machine Language	
Acct 211 Cost Accounting	3	Comp 200 Systems Development	3
(or Acct 212)		and Design	
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Comp 130 Advanced Programming	3	MM 350 Business Organization	3
Comp 140 Data Processing	3	& Management	
Applications		Psy 100 General Psychology	3
	_		_
	17		10

# ASSOCIATE OF SCIENCE

# **Computing Analysis**

# **Suggested Order of Study**

1st Semester		2nd Semester	
	FIRST	YEAR	
Course	Hours	Course Ho	urs
Eng 101 English Composition	3	Comp 130 Advanced Programming	3
Math 150 Calculus & Analytical Geometry I	5	Math 250 Calculus & Analytical Geometry II	5
Comp 120 Introduction to	3	Phys 250 General Physics I	5
Programming		Comp 140 Data Processing	3
Psy 100 General Psychology	3	Applications	
P Sc 120 U. S. Government	3	HPER 101 Physical Activity	1
Psy 120 Freshman Orientation	1		-
	_		17
	18		
	SECONE	YEAR	
Math 260 Calculus & Analytical	5	Math 322 Differential Equations	3
Geometry III		Math 431 Numerical Analysis	3
Phys 260 General Physics II	5	Comp 220 Analog Computers	3
Comp 150 Computer Machines		Speech 100 Speech Techniques	3
Phys 272 Statics	3	Math 361 Problems & Statistics	3
HPER 102 Physical Activity	1		
	_		15
	17		

# ASSOCIATE OF SCIENCE

# **Electronic Data Processing Coordination**

# **Suggested Order of Study**

1st Semester		2nd Semester	
	FIRST	YEAR	
Course	Hours	Course	ours
Eng 101 Composition	3	P Sc 120 U. S. Government	3
Math 20-30 Beginning and	3	Acct 102 Elementary Accounting II	3
Intermediate Algebr	a	Comp 110 Key-Punch Operation	3
(or Math 110)		OA 102 Intermediate Typewriting	3
Acct 101 Elementary Accounting	3 1 3	OA 120 Intermediate Shorthand	3
Comp 100 Basic Computing	3	HPER 102 Introduction to	1
Machines		Physical Activities II	
GB 101 Introduction to Business	3		
HPER 101 Introduction to	1		16
Physical Activities 1			
Psy 120 Freshman Orientation	1		
	-		
	17		

# SECOND YEAR

Hours	Course Ho	urs
3	Bio 100 General Biology	5
3	Speech 100 Speech Techniques	3
	Comp 130 Advanced Programming	3
3	GB 220 Business Communications	3
	GB 121 Office Machines	3
3		_
cs 3		17
_		
15		
	3 3 3 cs 3	3 Bio 100 General Biology 3 Speech 100 Speech Techniques Comp 130 Advanced Programming 3 GB 220 Business Communications GB 121 Office Machines 3 cs 3

# ASSOCIATE OF SCIENCE

# **Drafting and Design**

# **Suggested Order of Study**

# 1st Semester

# 2nd Semester

#### FIRST YEAR

Course	Hours	Course	Hours
Draf 110 Introductory Drafting	3	Draf 120 Descriptive Geometry	3
Eng 101 Composition	3	Draf 130 Machine Drafting	3
Art 100 Art Composition	3	Speech 100 Speech Techniques	3
Psy 100 General Psychology	3	Eng 102 Composition	3
Math 20-30 Beginning and	3	Math 112 Trigonometry	2
Intermediate Algeb	ora	HPER 102 Introduction to	1
(or Math 130)		Physical Activities II	
HPER 101 Introduction to	1		_
Physical Activities I			15
Psy 120 Freshman Orientation	1		
	_		
	17		

# SECOND YEAR

5	Phys 152 Elementary College Physics II	5
3	Draf 210 Production Illustration	3
3	Draf 220 Architectural Drafting	3
	P Sc 120 U. S. Government	3
	Electives	3
3		_
3		17
	3	Physics II  Draf 210 Production Illustration  Draf 220 Architectural Drafting P Sc 120 U. S. Government

17

# ASSOCIATE OF SCIENCE

# **General Business**

# **Suggested Order of Study**

		_						
1	st	5	P	m	P	S	te	r

#### 2nd Semester

### FIRST YEAR

Course	Hours	Course Ho	urs
Eng 101 Composition Acct 101 Elementary Accounting GB 101 Introduction to Business Psy 100 General Psychology GB 110 Business Mathematics	3 3 3 3 3	Hist 110 U. S. History 1492-1877 Acct 102 Elementary Accounting II OA 102 Intermediate Typewriting Speech 100 Speech Techniques Eng 120 Masterpieces of World	3 3 3 3
HPER 101 Introduction to Physical Activities I Psy 120 Freshman Orientation	1	Literature HPER 102 Introduction to Physical Activities II	1
	17		16

#### SECOND YEAR

Econ 201 Principles of Economics GB 220 Business Communications MM 300 Principles of Marketing GB 301 Business Law Math 20-30 Beginning and Intermediate Algebra (or Math 110)	3 3 3 3 3	Bio 100 General Biology Econ 202 Principles of Economics GB 302 Business Law MM 350 Business Organization and Management Electives	5 3 3 3 

# ASSOCIATE OF SCIENCE

# **Law Enforcement**

# **Suggested Order of Study**

#### 1st Semester

#### 2nd Semester

#### FIRST YEAR

Course	Hours	Course Ho	ours
Eng 101 Composition	3	Math 110 Intro. to College Math I	3
P Sc 210 State and Local	2	Psy 100 General Psychology	3
Government		Phys 100 Fundamentals of	5
Soc 110 Intro. to Sociology	3	Physical Science	
HPER 160 Personal Health	2	Soc 212 Social Problems	3
LE 100 Intro. to Law Enforcemen	t 3	LE 150 Interview and Report	2
LE 110 Police Organization and	2	Writing	
Administration			_
Psy 120 Freshman Orientation	1		16

# **SUMMER**

LE 190 Supervised Police Work I 6

#### SECOND YEAR

Course	Hours	Course	Hours
Speech 100 Speech Techniques	3	Hist 110 U. S. History 1492-1877	3
Soc 322 Criminology	3	Soc 412 Juvenile Delinquency	3
LE 200 Criminal Investigations	3	HPER 212 First Aid and Safety	4
LE 210 Criminal Procedures	3	LE 250 Criminal Law	3
Psy 221 Psychology of Personal	3	LE 290 Supervised Police Work II	3
Adjustment			_
			16
	15		

#### ASSOCIATE OF SCIENCE

# **Machine Technology**

# **Suggested Order of Study**

1st Semester		2nd Semester
	FIRST YEAR	

Course	lours	Course Ho	urs
Math 130 College Algebra	3	Mach 150 Technical Mathematics	3
Eng 101 Composition	3	Mach 160 Process Instrumentation	3
Draf 101 Introductory Drafting	3	Draf 130 Machine Drafting	3
Mach 100 Intro. to Machine Tool	1 5	Mach 110 Advanced Machine	5
Activities		Tool Processes	
HPER 101 Introduction to	1	HPER 102 Introduction to	1
Physical Activities I		Physical Activities II	
Psy 120 Freshman Orientation	1		_
	_		15
	16		

#### SECOND YEAR

Hist 110 U. S. History 1492-1877	3	Speech 100 Speech Techniques	3
Phys 100 Fundamentals of Physical Science	5	Mach 230 Jig and Fixture Production	3
Mach 210 Fundamentals of Cutting Tools	5	Mach 260 Fundamentals of Metalurgy	3
Mach 220 Tool and Die Production	on 3	Mach 250 Numerical Control Machining	3
	16	Psy 100 General Psychology	3
			-
			15

2nd Semester

#### ASSOCIATE OF SCIENCE

# Nursing

# **Suggested Order of Study**

1st Semester

		FIRST	YEAR	
Course	1	lours	Course Ho	urs
	Human Anatomy and Physiology	5	Chem 100 Introductory Chemistry Psy 100 General Psychology	5
	Composition Introduction to Sociology	3 y 3	Nurs 120 Nursing in Physical Illness I	8
	Fundamentals of Nursing Introduction to	ig 5	HPER 102 Introduction to Physical Activities II	1
	Physical Activities I			_
Psy 120	Freshman Orientation	1		17
		18		

#### **SUMMER**

Nurs 130 Nursing in Mental Illness 4

# SECOND YEAR

Bio 231 Fundamentals of Medical Microbiology	5	P Sc 120 U. S. Government Speech 100 Speech Techniques	3
Eng 102 Composition	3	Nurs 240 Nursing in Physical	10
Nurs 210 Maternal & Child Health	10	Illness II	
			_
	18		16

#### ASSOCIATE OF SCIENCE

#### **Secretarial Science**

# **Suggested Order of Study**

1st Semester 2nd Semester

#### FIRST YEAR

Course	lours	Course	Hours
Eng 101 Composition	3	Hist 110 U. S. History 1492-1877	3
OA 111 Elementary Shorthand	3	Speech 100 Speech Techniques	3
OA 102 Intermediate Typewriting	g 3	OA 120 Intermediate Shorthand	3
GB 101 Introduction to Business	3	OA 200 Advanced Typewriting	3
Acct 101 Elementary Accounting	1 3	Eng 120 Masterpieces of World	3
HPER 101 Introduction to	1	Literature	
Physical Activities I		HPER 102 Introduction to	1
Psy 120 Freshman Orientation	1	Physical Activities II	
	_		_
	17		16

#### SECOND YEAR

Course	Hours	Course Ho	urs
Math 20-30 Beginning and	3	Bio 100 General Biology	5
Intermediate Algebra	ra	GB 220 Business Communications	3
(or Math 110)		OA 230 Secretarial Procedures	3
GB 121 Office Machines	3	GB 301 Business Law	3
Psy 100 General Psychology	3	OA 220 Dictation & Transcription	3
Econ 201 Principles of Economic	cs 3		-
OA 210 Advanced Shorthand	3		17
	_		
	15		

# **Secretarial-Typist Certificate**

# **Required Order of Study**

#### **One-Year Schedule**

#### 1st Semester 2nd Semester Acct 101 Elementary Accounting I GB 220 Business Communication 3 3 OA 200 Advanced Typewriting 3 Eng 101 Composition 3 GB 121 Office Machines GB 101 Introduction to Business 3 3 GB 110 Business Mathematics 3 OA 220 Dictation & Transcription 3 OA 210 Advanced Shorthand 3 Speech 100 Speech Techniques 3 Psy 120 Freshman Orientation 1 15 16

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